This Scanning Electron Micrograph (7000×) is the first 3-dimensional view of a cell in an ulcerated duodenum. The center is completely denuded, surrounded by fairly well-preserved microvilli. This SEM photomicrograph was taken from a scientific exhibit which won the Hull Award as the "best exhibit on original research or instruction on a medical subject" at the A.M.A. Clinical Convention, November 26-29, 1972, in Cincinnati, Ohio.

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Baltimore News-American Photo

Dr. Jacob Conn (insert) helped Oriole hitter Paul Blair out of a slump.

Psychiatrist Pulls Big-League Hitter Out of Slump in One Hypnosis Session

Medical Tribune Report

BALTIMORE—A distinguished Baltimore psychiatrist, Dr. Jacob Conn, has just landed on the sports pages of the nation—as well as in the baseball record books—by bringing a big-league hitter out of a slump with hypnosis. What is more, it was all done in one easy session.

The Oriole hitter, Paul Blair, who had been in a slump for three years, now has the hottest bat in baseball. His batting

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Nonsystemic Contraceptives: Three Kinds Called Promising

Three new developments in contraceptive techniques are, from left to right, the soft pouch, the Tatum T, and the device to block the fallopian tubes with silicone rubber.

Medical Tribune Report

BAL HARBOUR, FLA.—Three new developments in contraceptive techniques—a reversible blocking of the fallopian tubes and two adaptations of the intrauterine device—were described here at the annual clinical meeting of the American College of Obstetricians and Gynecologists.

All three reports expressed enthusiasm about results so far observed in clinical trials or animal studies, but each also cautioned that the new techniques are still in the investigative stage.

Blockage of the fallopian tubes "appears to have great family-planning potential as a transcervical, nonincisional procedure which would be accomplished on an outpatient basis," according to a research team from Hahnemann Medical College and Hospital and the Franklin Institute Research Laboratories, Philadelphia.

Robert A. Erb, Ph.D., of the institute, said the group's work with rabbits has now demonstrated that installation of medical-grade, cured-in-place silicone rubber in the oviducts produces potentially reversible contraceptive sterilization.

In a series of 19 treated rabbits observed for 53 to 56 days, pregnancy occurred in only one uterine horn—where the plug had been improperly installed. In a later series of nine animals observed for several months, pregnancy again occurred in only one horn from which the plug had been lost through backflow a week after installation. Similar tests are now under way in rhesus monkeys.

Plugs in most instances could be re-

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INSIDE THIS ISSUE

New Administration Health Plan to Take Hard Line on MDs

Medical Tribune Report

WASHINGTON—The Administration has served notice on the medical profession that its forthcoming version of a national health insurance proposal will take a much harder line on controlling the cost, quality, and distribution of physician services in the United States than past proposals.

This impression clearly emerged from remarks made by top Administration officials during a two-day White House seminar for medical writers from all over the country.

Past Efforts Piecemeal

The officials conceded that much of the failure to solve the nation's major health problems was due to the piecemeal approach of past Federal efforts, but they were also sharply critical of medical practices that they feel have exacerbated some of those problems.

It was made clear, too, that the new proposal will include cost control mechanisms to prevent such abuses as have occurred under Medicare and Medicaid.

The strongest criticism of the medical profession came from the Administration's top physician, Assistant Secretary for Health Dr. Charles C. Edwards, who:

- Made light of potential American Medical Association opposition to the Professional Standards Review Organization (PSRO).
- Suggested that the "doctor shortage" is partly the result of overspecialization.
- Questioned the need for much of the elective surgery performed by American surgeons.
- Criticized physicians for failing to heed Food and Drug Administration warnings about overprescribing of antibiotics.

Dr. Edwards' remarks led one writer to

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Cholesterol Assays Urged in Children To Spot Those at Atherosclerosis Risk

Medical Tribune World Service

QUEBEC—Serum cholesterol levels should be assayed as part of the routine examination of all children in order to determine those at risk of "premature atherosclerosis," three leading Canadian pediatricians urged here.

A random study of 1,232 children uncovered eight cases of type 2 hyperlipoproteinemia and seven cases among parents and siblings, said Drs. Richard G. Pearse, Vera Rose, and John D. Keith, of the Hospital for Sick Children, Toronto. The incidence of one in 150 of type 2 is consistent with previous reports, they said. Three cases of type 4 were also seen.

The random serum cholesterol determination is an important aspect of preventive medicine, the investigators said, pointing out that untreated patients with the heterozygous form of the disease have a poor long-term prognosis and that patients with homozygous cases usually die before the age of 20. The report was delivered at a meeting of the Canadian Pediatric Society.

Commenting that it is of "paramount

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On Parle Francais Ici —But Not Very Well

Medical Tribune World Service

QUEBEC—The traditional greeting *en français* that *"les Anglais"* give at meetings here proved a bit of a problem for Dr. James B. J. McKendry, senior staff physician, Hospital for Sick Children, Toronto, when he spoke to the Canadian Pediatric Society here.

"I'm ashamed of my French, but I didn't know any until 10 minutes ago," he said.

Dr. Michel Delisle, the chairman, interjected, "I taught you your French 10 minutes ago and I'm ashamed of it, too."

INTERNATIONAL MEDICAL EDITION

Ontario MDs' Medicare Records to Be Checked

Medical Tribune World Service

TORONTO—Ontario physicians who treat an unusually large number of patients under Medicare are going to have their records closely scrutinized by the College of Physicians and Surgeons of Ontario, the province's professional licensing authority.

The college announced here that any doctor who provides more than 300 units of service to patients in a week will be subject to investigation. A unit, equal to an office visit, is worth $6. A house call, at $9, would be a unit and a half.

The Ontario Medical Association has agreed to set up a joint committee with the Government that would determine how much and how doctors should be paid.

Dr. Richard T. Potter, Ontario Minister of Health, said the Government has no intention of putting all doctors on salary. But he stressed that the ceiling set on a physician's work load by the college demonstrates concern for the quality of medical care.

"As a family physician myself, I know that the doctor who is seeing more than 300 patients a week is getting damned little sleep and doing nothing else," Dr. Potter declared. He said that he "can't buy the claim" by one physician who billed the Medicare system for seeing 316 patients in one day.

■

Breast-Feeding Has Dropped 49% in Sweden

Medical Tribune World Service

STOCKHOLM—From 1944 to 1970 the number of six-month-old Swedish babies being breast-fed dropped from 56 per cent to 7 per cent.

In an effort to discover why, Drs. Yngve Hofvander and Stig Sjolin, of the pediatric clinic at Uppsala's University Hospital, gave one-hour questionnaire interviews to 298 mothers of 302 children.

The investigators found that on discharge from the maternity ward, 72 per cent of the women were breast-feeding exclusively and 87 per cent partially. The frequency dropped rapidly after their return home.

Average duration of breast-feeding was nine weeks. By the end of the first month, 56 per cent had stopped completely or had introduced regular alternative feeding forms. By the end of the third month fewer than one-third were still breast-feeding and only one-sixth exclusively. At six months, 4 per cent were still breast-feeding for certain meals.

92% Planned to Breast-Feed

Some 92 per cent of the mothers said they had planned to breast-feed, most of them "as long as they could," at the time of delivery. Asked directly what they thought about breast-feeding, 68 per cent said they liked it "a lot" or "relatively much." Only 11 per cent admitted to not liking it.

The main reason for stopping reported by 66 per cent was that they "just ran dry." Only 10 per cent blamed "faulty breasts" or "deficiencies in their children."

"Most mothers are, or pretend to be, unaware of the real reasons for early discontinuance of breast feeding," Dr. Hofvander commented.

When asked why they thought other mothers discontinued breast-feeding early, the mothers provided answers that in many cases were at variance with those they applied to themselves.

Physical and mental fatigue, for example, was given as a reason for cessation in others by 17 per cent, against 8 per cent for cessation by themselves. Also, 27 per cent thought others considered breast-feeding "messy," while only 5 per cent thought so themselves. Similarly, 38 per cent thought others considered breast-feeding to be uncomfortable and an encroachment on personal freedom, whereas only 4 per cent felt this themselves.

Only 0.5 per cent of the mothers offered personal appearance as a reason for having terminated breast-feeding. But 12 per cent believed this to have been the reason among other women.

"It is probable," Dr. Hofvander said, "that the mothers' conception of why others terminate breast-feeding to a certain, perhaps a great, extent is an unconscious projection of their own experiences, and thus best reflects their own feelings."

■

Herbs for Healing Sought

In Red China, where herbs are still often used for medicinal purposes, finding and picking them can be quite a job. Here climbers go up the side of Mount Huangshan in Anhwei Province to gather the valuable herbs. The area is known for its beautiful landscapes.

Mercury Pollution Warnings Send Sale of Fish Tumbling

Medical Tribune World Service

KYUSHU, JAPAN—Warnings by the Government of the dangers of mercury pollution have sent fish sales tumbling in markets throughout Japan and created storage problems for fishing fleets and distributors.

Tentative tolerance levels for mercury in fish and shellfish have been set at the world's lowest levels, on the basis of a report by a group of experts set up after the third confirmed outbreak of Minamata disease in Kyushu in May.

The weekly intake for an adult has been fixed at 0.17 mg. of methyl mercury. The average concentration of all mercury must be below 0.4 ppm, and 0.3 ppm in the case of methyl mercury, compared with 0.5 ppm of all mercury set by the United States and Canada and 1 ppm by Sweden and Finland. The experts warned that pregnant women, in particular, should strictly observe the levels indicated because of the susceptibility of the fetus.

The Government has also issued a typical menu in its efforts to get citizens to hold their fish and shellfish intake to 567 Gm. per week. One example for a week's consumption listed four small horse mackerel, half of a medium flatfish, and one medium squid. Another example was three young punctatus, one mackerel pike, one prawn, and 20 slices of raw tuna.

Health experts warned further that the 567-Gm. weekly limit refers to dried fish, fish meal, canned fish, and ham and sausage made from fish.

But, after the initial scare, the Government's Environmental Agency came out with a revised list of fish quantities—about double the first list—that could be safely consumed in a week.

■

Airplane Exhaust Fumes Are Called Major Cause Of Pollution in Japan

Medical Tribune World Service

YOKOHAMA, JAPAN—Exhaust fumes from aircraft, not automobiles, are the major cause of photochemical smog in Japan, according to Prof. Tetsuzo Kitagawa, of Yokohama National University.

The large quantities of exhaust fumes discharged by jet planes flying through the inversion layer become oxidized by strong rays of the sun, according to Professor Kitagawa's theory. His studies found that the exhaust fumes combine with vapor and they become three times heavier than the air. This mass then descends to just above ground level, causing localized photochemical smog.

He found that the smog usually occurs near airfields, especially in cities located between 35 and 45 degrees north latitude, which are exposed to the sun's rays at certain angles. This explains, he said, why the smog frequently occurs in areas where vehicular traffic is relatively light.

A DC8 aircraft, he said, consumes 25,800 L. of fuel when climbing, about 4,000 times the average amount consumed by a car.

Japan Plans to Establish Continuing MD Education

Medical Tribune World Service

TOKYO—The Health and Welfare Ministry plans to establish a system of lifelong education for doctors. Ten professors are to be selected from the Japan Medical Association to draft the details of the program.

Under the proposed system, all physicians will be required to undergo regular qualification tests.

Urinary Infections Found

Medical Tribune World Service

DUBLIN—A recent survey of 17,000 schoolgirls here showed that 2 per cent had unsuspected urinary infection. Of those infected more than half, almost 200, had an underlying abnormality of the kidney or bladder.

Highest Cancer Mortality Found in 35-64-Year-Olds

Medical Tribune World Service

TOKYO—The heaviest cancer mortality in Japan in 1971 was in the 35-to-64-year age group. Cancer was responsible for 21.1 per cent of deaths in the age bracket of 35 to 39 years and 24.8 per cent in those from 40 to 44 years of age.

Stomach cancer still claimed the most victims, but the number of deaths is decreasing while lung cancer deaths are climbing.

■

1973 Smallpox Incidence Doubles in Comparison With First Half of 1972

Medical Tribune World Service

GENEVA, SWITZERLAND—The reported incidence of smallpox almost doubled during the first half of this year over that during the same period in 1972, the World Health Organization reported.

India and Bangladesh, where the disease is endemic, account for almost 88 per cent of the 77,984 cases reported this year. Both countries have been reporting the highest incidence since the global program for eradication of smallpox began seven years ago.

Cases also occurred in four other countries of Asia this year. In Pakistan smallpox is also endemic, but all cases in Afghanistan (14), Japan (1), and Nepal (104) were the result of importation from India, Pakistan, and Bangladesh.

In Africa, WHO reported, progress continues to be satisfactory.

MDs Told to Set Own Standards Or Lose Control

Medical Tribune Report

NEW YORK—The Federal Government's top physician reminded the American Medical Association here that if the medical profession does not set the standards for medical care, the job will be done by "some bureaucratic agency in Washington."

Dr. Charles C. Edwards, assistant secretary for health in the Department of Health, Education, and Welfare, told the A.M.A. House of Delegates that "the public is not going to accept a continuation of things as they are." He emphasized that "if physicians continue to insist on the freedom to exercise their own professional judgment, then they must accept the responsibility to assure the quality of the care they provide."

He said the A.M.A. was "making the right choice" by taking an active role in development of the Peer Standards Review Organization concept that came into law last fall with H.R. 1. He pointed out there were other activities that the A.M.A. might get into.

For instance, said Dr. Edwards, the recent passage of legislation extending many Federal health programs for another year provides "a challenge and an opportunity to take another look at . . . Regional Medical Programs, Hill-Burton, Community Mental Helath Centers, and the rest."

Dr. Edwards conceded that the Government had been "too long without a clear, articulate national health strategy . . . because the Federal health enterprise has not been organized to develop one." However, "we are now in the process of putting our own house in order," he said, "for the coordination of our efforts and for productive communication with those outside Government."

Advice for the Chronically Ill

Mrs. Armeta Livingston, a member of the Chronically-Ill Ladies Group at Brooklyn's Downstate Medical Center, tells a cardiac patient about pacemaker surgery and how to live with it. The group was organized to encourage the chronically ill toward independence.

Federal Safeguards Urged Against Sterilization Abuses

Medical Tribune Report

NEW YORK—The Planned Parenthood Federation of America has called on the Government to set up a working conference of experts to help draft Federal safeguards against "potential abuse" of contraceptive sterilization in persons who are "uneducated, young, emotionally immature, or mentally retarded."

Condemning the sterilization of several young girls by the Montgomery County Community Action Agency in Alabama, Dr. Allan F. Guttmacher, federation president, said: "In our view it is imperative that the Department of Health, Education, and Welfare issue regulations or guidelines to govern the provision of sterilization in Federal programs."

Views Given in Letter

His views were made known in a letter to Dr. Louis Hellman, deputy assistant secretary for population affairs.

Dr. Guttmacher reaffirmed the federation's support of voluntary sterilization "for anyone who is fully informed of the nature of the procedure and who is mature enough voluntarily to decide on this permanent method of birth control," but he pointed to the "particularly difficult ethical and legal problems associated with the treatment of retarded and immature persons" where sterilization is offered.

The working conference, he suggested, should consist of "knowledgeable representatives of professional medical organizations, consumers, the bar, state and local health officials, experts in the field of retardation, and family-planning program administrators."

ECTOPIC BEAT

"Twenty-Fifty Wedding Anniversary dates are on the calendar in May and June for several members and warmest wishes and congratulations go to. . . ."
—*Dr* of the Lehigh County (Pa.) Medical Society.

Those the odds, or what?

(Regular beats Immateria Medica, page 43.)

Pulmonary Edema May Still Follow Drowning Rescue

Medical Tribune Report

NEW YORK—The risk of death from drowning does not end once the victim has been revived, a leading investigator warned here, adding that all near-drowning victims who require artificial respiration should be hospitalized for 24 hours immediately after the accident.

Lung damage can occur even if water is not breathed into the lungs, said Dr. Martin J. Nemiroff, of University Hospital, Ann Arbor, Mich. The brief period of suffocation and lack of oxygen during submersion can cause pulmonary edema, he warned the American Lung Association. He stressed that near-drowning and related deaths are not recorded by law and thus, he suggested, their incidence may be more common than realized.

Eight Cases Described

Dr. Nemiroff described eight cases with one death in one geographic area. Six of the eight walked away from the scene of the accident, only to be hospitalized after rapidly progressive shortness of breath two and a half to 12 hours later. Another was hospitalized immediately, and one died a half hour after near-drowning.

The amount of fluid in the lungs of the seven survivors varied, but increased in all of them during the first 24 hours after the near-drowning. The edema led to hypoxemia, hypercapnia, and metabolic acidosis. The near-drowning also caused damage to the lungs' capillaries.

Continuous positive-pressure breathing was used to prevent both lung collapse and the seeping of fluid into the lungs. Three patients whose x-rays showed the greatest amount of fluid in the lungs also required endotracheal intubation.

NEWS INDEX

CLINICAL NEWS NOTE: *"Fiberoptic colonoscopy constitutes a real advance in the diagnostic and therapeutic armamentarium of the medical profession." (Dr. William I. Wolf); see page 33.)*

FEATURE INDEX

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IN CONSULTATION

What's new and important in perinatal medicine?

The Consultant

DR. ROBERT J. LUBY

Department of Obstetrics and Gynecology, Creighton University, St. Joseph Hospital, Omaha, Neb.

"... a significant reduction in perinatal mortality remains to be achieved in this country...."

THE NEW AND IMPORTANT DEVELOPMENTS in perinatology may be considered in three categories: first, laboratory studies; second, equipment; and third, the impact of inhouse newborn specialists on observed newborn death rates.

First, the ability to study amniotic fluid phospholipid levels and to predict, with reasonable accuracy, those infants wth pulmonary maturity has been most helpful. Since Gluck's original report, we have used his exact technique in our laboratory and have found his results to be reproducible. To date, we have seen no infants die of respiratory distress with a mature pattern. We have encountered severe respiratory distress with an intermediate pattern and with immature patterns, and infants with immature patterns who did not develop respiratory distress.

In the area of equipment, the availability of accurate, relatively low-cost monitoring equipment for labor and delivery units has improved significantly the quality of observation of the infant during labor. The expenditure of $7,000 to $8,000 per unit, while significant, pales when one considers the cost of new diagnostic or therapeutic radiology equipment. This monitoring, plus the demonstration and availability of positive pressure treatment for the neonate, is extremely promising.

Dr. Graeven and others have shown repeatedly, insofar as the third category is concerned, that infant death rates are reduced from 15 to 17 per thousand live births to under 10 per thousand live births with the presence of a newborn specialist and his supporting skills in the delivery unit. It is obvious that prompt attention to required ventilatory and chemical resuscitation is rewarded in terms of useful life preservation.

When should amniotic fluid be analyzed to determine fetal maturity and how is this done?

Amniotic fluid analysis for purposes of fetal maturity determination should be performed whenever this information contributes to the management of the patient, e.g., pregnancies to be terminated by elective C-section when the estimated date of confinement is uncertain, some instances of third trimester bleeding to aid in the timing of double setup examination, pregnancies complicated by diabetes and Rh sensitization, and pregnancies with severe toxemia. This is not all inclusive and, in general, whenever determination of fetal maturity provides the clinician with information justifying the risk of the amniocentesis, it is an indicated procedure.

Amniotic fluid is obtained generally by transabdominal amniocentesis. I prefer using Freda's technique of manual displacement of the head, in those cases not associated with third trimester bleeding, and penetration of the uterus immediately overlying the hairline approximately 1 cm. above the pubic symphysis, after the patient has voided. Placental localization prior to diagnostic amniocentesis, if available, is worthwhile. We studied amniotic fluid creatinine levels, osmolality, delta optical density at 450 millimicrons, as well as the lecithin/sphingomyelin ratio, alluded to above. None of these tests by themselves are 100 per cent reliable. The creatinine is a measure of muscle mass, the osmolality of fetal renal development, while the lecithin/sphingomyelin ratio measures the presence of the phospholipids in the pulmonary system.

"It is important that when the amniotic fluid is drawn that it should be analyzed immediately..."

In terms of infant survival, the most significant limiting factor is pulmonary function. Thus, if we find intermediate or mature LS ratio, we are not the least bit uncomfortable with immediate delivery. We have encountered a patient, whose fetus had proximal femoral and distal femoral and proximal tibial epiphysis, who underwent amniocentesis for another reason and had an immature LS ratio. The infant did indeed develop respiratory distress, even though there was radiologic evidence of skeletal maturity. Some have reported LS ratio to be inaccurate in patients with diabetes. This has not been our experience, nor has it been Dr. Gluck's experience.

It is important that when the amniotic fluid is drawn that it should be analyzed immediately or certainly within the first three to four hours. Most laboratories are able to provide this service, and the report for us is available usually within two hours of obtaining the fluid.

Under what circumstances is electronic monitoring advisable during delivery and what should it include?

The answer to this question is not yet "in," as they say. What remains to be demonstrated is whether routine electronic monitoring during every patient's labors can completely prevent intrapartum mortality. Saling indicated, in his experience, that combining electronic monitoring with fetal scalp sampling and intervening when significant fetal compromise was indicated by both of these procedures could result in avoiding all instances of intrapartum death. Most institutions apparently are monitoring those so-called high risk pregnancies. It has been demonstrated that ap-

Continued on page 34

Next In Consulation

DR. MARTIN D. VALENTINE, of the Clinical Immunology Division, The Johns Hopkins University School of Medicine, and The Good Samaritan Hospital, Baltimore, Md.

... will discuss such subjects as:

- First steps in the management of a patient presenting with severe seasonal hay fever.
- How further work-up with such a patient is carried out.
- What results can be expected from desensitization?
- What is the value of skin tests? Do emotional factors influence or trigger symptoms of hay fever?

Swedish Incest Today Has More Father/Daughter Unions

Medical Tribune World Service

STOCKHOLM—Incestuous unions between fathers and daughters account for a significantly larger proportion of incestuous relationships in Sweden in modern times than in the 17th and 18th centuries, according to a study at Karolinska Institute.

Investigation of 465 incest cases showed that 60 per cent were a father/daughter relationship (75 per cent, if stepdaughters were included), 20 per cent a brother/sister relationship, and 1 per cent a mother/son relationship. The remaining cases consisted mainly of sexual contact between men and minor grandchildren or nieces.

The cases were recorded at the Clinic for Forensic Psychiatry here during the years 1934-55. Comparison with material from the 17th and 18th centuries showed a basic similarity in the proportions of brother/sister and mother/son relationships. Unions between fathers and daughters, on the other hand, were considerably more prevalent than several centuries ago.

Partners Were In-Laws

In the 17th century, the largest group of incestuous partners was composed of brothers-in-law and sisters-in-law, a relationship no longer considered incestuous in most countries. The penalty for such a union was usually death. Sweden discontinued the death penalty for all forms of incest in 1864.

The incest study was described at Sweden's Royal Academy of Sciences here by Dr. Carl Henry Alstrom, Professor of Psychiatry at Karolinska Institute. He said it is difficult to arrive at a valid estimate of the frequency of incest in Sweden, partly because welfare authorities are more often concerned with the health and well-being of the child than with legal action. Earlier *studies, however,* indicate that the number of persons convicted or acquitted of incest in Sweden each year is about 30.

Dr. Alstrom made a follow-up study of part of the 1934-55 material and found that there were 246 families with father/daughter incest and that, in all, 333 daughters were involved in incestuous relationships.

Two-thirds of the fathers were found to be under 45 years of age at the onset of their illicit behavior; only one-fifth were over 50. All were married. Daughters' ages were, on the average, very low. Two-thirds of the contacts went as far as coitus.

In almost half the cases that were studied the relationship lasted three years, and in 5 per cent 10 years or more.

Relationships Were Rather Long

"Thus, it is a question of relationships of rather long duration," said Dr. Alstrom, "and it is hardly possible that they always occurred at the insistence of the father. Nor have they been initiated in this way. Closer analysis shows that they have started with natural 'cuddling.'"

At the onset of the incestuous relationship, 61 per cent of the fathers resided in the countryside—a ratio that was in agreement with the distribution of the population as a whole. Thus, father/daughter incestuous contact is not concentrated in a particular geographic or social area, Dr. Alstrom observed.

On the other hand, the frequency of nonqualified workers was higher among the incestuous fathers (16 per cent) than among fathers in the general population (1.5 per cent).

Daughters Later Married

Two-thirds of the daughters who had incestuous relationships with their fathers subsequently married. This was about 20 per cent more than could be expected, according to general population figures. The number of children, however, was 15 per cent less than expected, the study found.

The daughters displayed surprisingly few overt neurotic symptoms, said Dr. Alstrom. Positive relations—even sexually—to their husbands were reported by 80 per cent of the married daughters.

Half the daughters did not have any contact with their fathers after the trial, but 20 per cent resumed a close and regular contact with their fathers after the latter's release from prison or from a mental hospital.

Fat Women Are More Attractive When Fear of Starvation Exists

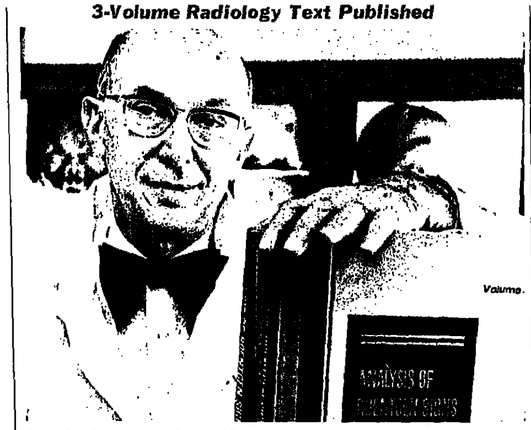
Medical Tribune World Service

QUEBEC—In times or places where men fear starvation, the fat woman is beautiful. So says Dr. Jean Tremolières, Professor of Biology and director of the Laboratory of Human Nutrition, Bichat Hospital, Paris.

A woman's plumpness offers reassurance that the fear of starvation will not come true, he told the Canadian Pediatric Society. Venus typified beauty at a time in history when starvation was a constant worry.

Modern woman, "who looks like a man," is considered beautiful because man's greatest fear is not lack of food "but loss of his sex," he said.

3-Volume Radiology Text Published



Dr. Isadore Meschan, Professor of Radiology and chairman of the department at the Bowman Gray School of Medicine, Wake Forest College, Winston-Salem, N.C., is shown with his new three-volume radiologic textbook, *Analysis of Roentgen Signs in General Radiology*. The book, which is published by W. B. Saunders Co., is the largest single-author general radiologic text ever published.

SURGICAL NOTES

Plantar Warts Dissected

HANOVER, N.H.—Blunt dissection of plantar warts is superior to surgical procedures employing sharp instruments, according to Dr. Warren M. Pringle and Donald C. Helms, of Dartmouth Medical School.

With a single treatment, the cure rate in 58 patients totaled 85 per cent after an average follow-up of 10 months—minimum of six months—which, the investigators said, was significantly higher than the 70 to 75 per cent rates with desiccation and curettage reported by other authors. Other advantages, they added, are easy control of bleeding, short duration of pain (average three days), and absence of tender scar formation.

Under local anesthesia, they explained, a blunt dissector is used to encircle the wart. Application of firm pressure and a peeling motion rapidly and precisely separates the lesion from the peripheral tissue. A light, scooping motion under the base then separates the wart from its loose connection with the dermis, leaving the dermis practically intact. The callused margins of the wound are trimmed, and it is covered with a pressure dressing that is replaced in two days with a Band-Aid.

Indirect Aneurysm Therapy

ROCHESTER, N.Y.—Indirect surgical treatment of intracranial arterial aneurysms may have a "significant clinical advantage" over direct surgical or nonsurgical treatment of this often fatal disorder, according to Dr. Frank P. Smith, of the University of Rochester Medical Center.

In the past 13 years, he said, differential carotid artery ligation achieved an 81 per cent, two-year survival in 70 patients. This compares with the 57 per cent, two-year survival rate for direct surgical treatment and the 32 per cent rate for nonsurgical treatment.

During this period, he said, "I have not performed intracranial surgery for aneurysm."

Hip Replacement Improved

COLUMBUS, OHIO—Patients undergoing total hip replacement with trochanteric osteotomy achieve better postoperative performance than those without trochanteric osteotomy, according to Dr. Thomas H. Mallory.

When two groups of 25 patients were evaluated, one with and one without trochanteric osteotomy, the patients in both groups demonstrated consistent and "remarkable" relief of pain. However, the loss of limp, negative Trendelenburg's sign, and active abduction against gravity were substantially better 12 months postoperatively in the trochanteric osteotomy group.

"The advantages of better exposure, less damage to the abductor mechanism, and restoration of biomechanical equilibrium are credited for the more satisfactory performance by patients undergoing total hip replacement with trochanteric osteotomy," said Dr. Mallory.

Shoulder Pain Relieved

DENVER—Results of surgery of the shoulder in patients with rheumatoid arthritis are encouraging, according to a review of 16 cases by Drs. Mack L. Clayton and Donald C. Ferlic.

Two procedures in the 16 patients were performed because of large bursal sacs, they reported, with relief of pain. Of the other 14 shoulders operated on for pain, 13 had significant relief and the 14th did well for four months and then had a gradual return of pain to the preoperative level. This failure was in a patient with rheumatoid spondylitis and recurrent subluxations of the shoulder.

"In no patient was there a decrease in the range of motion from that before surgery, and in nine the range of motion increased. No patient was made worse by the surgery," they reported.

Indium Compound Localizes Occult Tumors

RESEARCH

Medical Tribune Report

WASHINGTON—Many difficult-to-detect or occult tumors can be localized by using radioactive indium[111] in combination with a substance that is readily absorbed by tumor cells, a British investigator has reported.

Preliminary animal and human trials with the agent were described as encouraging by Matthew L. Thakur, of the British Medical Research Council's cyclotron unit at Hammersmith Hospital, London.

Mr. Thakur developed the technique for binding radioactive indium to bleomycin, an antibiotic produced by a strain of Streptomyces verticillus that is selectively absorbed by tumor cells.

Tumor Identification Facilitated

Clear pictures produced by the gamma rays emitted by indium[111] allow identification of cancers of the brain, neck, colon, rectum, ovaries, breasts, and lungs, as well as secondary tumors that are often missed by other diagnostic agents, according to Dr. Malcolm V. Merrick, a colleague of Mr. Thakur.

The indium-containing compound was reported to have revealed evidence of secondary tumors in two of 20 patients with suspected brain tumors that had not been detected with technetium[99]. Infarcts were distinguished from brain tumors in two other patients, the investigators said, and in other patients the indium compound helped to identify the presence of meningioma, which was also undetected by technetium.

The study was reported in a recent issue of *Chemical and Engineering News*.

Growth-Accelerating Effect of HCG Detectable by Measurement of Ulna

Medical Tribune World Service

OSLO—The growth-accelerating effect of human chorionic gonadotropin treatment in boys with pubertal growth retardation is detectable within three weeks by measurements of the ulnar length, a Dutch investigator told the ninth Acta Endocrinologica here.

Dr. Ignatius M. Valk, of Catholic University, Nijmegen, reported that the pretreatment three-week ulnar growth rate of 0.5 mm. was significantly lower than in a group of normal pubertal controls (0.9 mm.).

After the first three-week period of HCG treatment, the mean three-week ulnar growth rate increased to 1.4 mm. Corresponding growth rates at the end of the second and third three-week periods of treatment were 1.4 mm. and 1.24 mm., respectively.

Growth Acceleration Consistent

During the entire treatment period, which varied from three to 33 weeks, the growth acceleration during gonadotropin treatment appeared to be consistent, Dr. Valk said.

He also said that prolonged treatment with chorionic gonatropins causes a consistent growth acceleration to supranormal pubertal growth rates.

Electrocochleography Used For Children, Balky Adults

Medical Tribune World Service

VENICE, ITALY—Electrocochleography is becoming a helpful alternative procedure in auditory testing of children and adults whose cooperation cannot be obtained, Dr. Moshe Feinmesser of Israel reported at the 10th World Congress of Otorhinolaryngology here. The technique records cochlear potentials by means of electrodes and an average response computer, as Dr. Feinmesser noted.

"However, it should be emphasized that cochleography should not be considered as replacement of conventional audiometry, even with improvement of the method and accuracy of the results," he said.

Apply Electrodes to Earlobes

Dr. Feinmesser, who is with Hebrew University Hospital, Jerusalem, said that in using electrocochleography he and his colleagues apply electrodes to the earlobe and the scalp, as opposed to electrodes that pierce the tympanic membrane or the skin of the external auditory meatus.

"We feel that the earlobe and scalp sites are more conducive to routine clinical use, and these same electrodes can also record the auditory cortical-evoked potential," he commented.

The use of these two electrode sites permits the recording of five neural waves, which represent activity generated by the auditory nerve and by the brain-stem auditory nuclei, he said.

Dr. Feinmesser said that the technique is being used for neonates, children with mental retardation, and cases of brain-stem damage, nonorganic or functional hearing loss, and malingering.

One of the disadvantages of the technique, he acknowledged, is that the stimulus is an acoustic click, and "this means that a cochleogram is a response mainly to high frequencies and does not give full information as to all frequencies used in conventional audiometry."

Also, the test does not appear to be as sensitive as pure-tone audiometry, Dr. Feinmesser added.

Coauthor of the report was Harvey Sohmer, Ph.D.

MD Delivers His 3rd Generation

Dr. Owen L. Frank of Maquoketa, Iowa, has delivered his own three children, two grandchildren, and now his great-granddaughter. Dr. Frank is shown with the new baby and her mother, Mrs. Phillip Brooks, whose husband is Dr. Frank's grandson.

Nasal Polyps Rarely Seen

ATLANTA, GA.—Nasal polyposis is a rarity in children, according to a 10-year survey of the pediatric admissions in two Chicago hospitals by Dr. Gilbert Lanoff, Anthony Daddono, and Dr. Eloise Johnson, presented here at the American College of Allergists meeting.

Of 84,489 admissions to Children's Memorial Hospital, nine children were admitted because of nasal polyps. Of 8,981 pediatric admissions to an affiliated general hospital in the same period, eight children had nasal polypectomies.

About half the children with nasal polyps at Children's Memorial had recurrent pulmonary infections. Allergy was a rare cause of nasal polyps at that institution, but there was a definite allergic history in three of the eight children admitted to the general hospital.

Hyperactivity Assessed

SAN FRANCISCO—For each hyperactive child it is necessary to assess what is worse, the illness or the treatment, Dr. Bayard W. Allmond, Jr., of the University of California, emphasized at a seminar here on Advances in Pediatrics.

Under the influence of drugs, he said, some hyperactive children become "compulsive, isolated goody-goodies who are terrorized by threats of punishment and not capable of a decent daydream." In fact, he said, several parents have asked to have medication stopped because of the "stranger in their midst."

Recent studies, he cautioned, have demonstrated that long-term treatment may retard growth in both weight and height. Methylphenidate at doses of less than 20 mg., he noted, apparently does not significantly affect growth.

If medication with stimulants has a beneficial effect in the classroom, Dr. Allmond suggested, they might be restricted to those periods when the child attends school.

Problem Is Nutrition

OTTAWA—The most serious health problem uncovered by a Pan American Health Organization survey of 15 regions was nutritional deficiency, Dr. Carlos V. Serrano, of PAHO, told the Canadian Public Health Association meeting here.

Fifty-seven per cent of the children who died under the age of five years were found to have nutritional deficiency or immaturity as the underlying or associated cause, he said. The 15 regions surveyed consisted of 13 in Latin America, one in the United States, and one in Canada.

Withholding Surgery

AUCKLAND, NEW ZEALAND—Surgeons are increasingly coming to the belief that it is better to allow some badly malformed babies to die, an Australian pediatric surgeon declared here.

They are also asking whether they should not select those patients they can repair, said Dr. E. Durham Smith, of the Royal Children's Hospital, Melbourne. His own view, Dr. Smith said, is that if the birth defect is not a potentially fatal one, the surgeon is committed to repair it. If, however, it is certain that death would occur in the absence of surgery, the surgeon should ask himself whether the quality of life available to the patient postoperatively would justify his intervention.

In spina bifida cases, he said, surgeons were earlier browbeaten into accepting the position that they must operate immediately in all cases. But the kind of life that resulted for the child was so poor in some cases that it now seems morally indefensible to use maximum effort to ensure survival, he said.

Methods of assessment are so much better now that it is possible to predict reasonably accurately what quality of life a baby with a particular degree of malformation will enjoy, Dr. Smith pointed out.

A.M.A. Opponents Of Abortion Fail To Reverse Policy

Medical Tribune Report

NEW YORK—The forces against abortion surfaced again here at the annual convention of the American Medical Association in an effort to offset the organization's 1970 policy relaxation that mainly says "abortion is a medical procedure."

Four California resolutions tackled the issue in ways that ranged from decrying the lack of children available for adoption to taking "a positive view of motherhood." A Louisiana resolution wanted state legislatures to adopt an amendment to the U.S. Constitution that would make abortion a matter of states' rights.

A committee of the A.M.A. House of Delegates that conducted hearings on the California measures said that it received more than a hundred telegrams and other messages on the issue, plus "an official statement from the Committee of Doctors and Nurses Against Abortion."

However, said the house committee, the existing A.M.A. policy provides that medical personnel shall not be compelled to perform abortions in violation of their medical judgment or moral principles. The committee recommended reaffirmation of the 1970 policy.

And the delegates reaffirmed it, in spite of the contention by Dr. Joseph P. Donnelly, delegate from Newark, N.J., that "our present policy favors unlimited abortion."

Immediately afterward the house also adopted a statement "affirming the traditional favorable attitude of the medical profession toward pregnancy and motherhood." This entails the establishment of "counseling programs that will offer constructive help to expectant mothers in accepting and coping with the stresses of pregnancy" and provides "incentives such as approval, appreciation, encouragement, and emotional support for a decision to continue pregnancy to term."

Amendment Called Premature

On the resolution for a U.S. Constitutional amendment, another house committee decided it was "premature" and suggested instead that the A.M.A. "monitor and study" the effects of the recent Supreme Court ruling that wiped out all state prohibitions against abortion. The delegates agreed to that approach.

But they were not finished with morality-tinged issues, and the two following items proved less easy to resolve. Both were introduced by the new Interns and Residents Section of the A.M.A.

One asked that the organization work to end legal and employment discrimination against homosexuals and legal restrictions on sexual behavior between consenting adults. The house sent the idea to the A.M.A. Council on Mental Health.

The other resolution sought A.M.A. endorsement of a program that would not only "teach moral and social responsibility" to youngsters but also push for state laws to "allow condom contraceptives to be displayed and sold openly above the counter without age restrictions."

A Florida delegate took the floor to ask sarcastically whether the house also should approve "IUDs at Girl Scout meetings, diaphragms in cereal boxes, and 'the pill' in bubble gum dispensers."

The delegate of the interns and residents, Dr. Eugene S. Ogrod, said he had to "regret the moral focus . . . [when] the issue is venereal disease, not pregnancy or morals."

Dr. Donnelly saw the item as part of "a great moral breakdown" and warned that "it won't solve our problems any more than other permissive actions have." He scorned the discussion itself, saying, "Goddamn it, once upon a time this organization had a moral conscience."

The delegates tabled the matter until it comes up again. The next opportunity will be the November convention in Anaheim, Calif.

Headache Expert Charges FDA Blocks Valuable New Drugs

Medical Tribune Report

NEW YORK—The president of the American Association for the Study of Headache charged here that the Food and Drug Administration has blocked the introduction of valuable new drugs for migraine and headache.

Asserting that the effort to "ensure safety for all is to deny therapy to any," Dr. Seymour Diamond declared that only five new prescription drugs were introduced in the United States in 1970, and "none of the 75 pharmaceuticals which were introduced in England between 1966 and 1972 have been approved for use in the United States."

He noted that pizotyline and clonidine have been found effective for use in some patients with migraine and headache, but he stressed that the drugs are not available to American physicians.

"Unwarranted" obligations placed upon the FDA by Congress, Dr. Diamond said, "have caused years of delay in the introduction of such excellent drugs as metronidazole, levodopa, lithium and another half-dozen fine products."

The FDA's reluctance to license new drugs has often forced physicians to use existing compounds in spite of FDA rules limiting their use, he asserted.

"All of us have used drugs such as propanolol, or the MAO inhibitors, or large doses of ergotamine tartrate in the prophylaxis of migraine. We have used these drugs in spite of the package circular or description of the drug which limits its use to other purposes or limits the amount of drug used to an insufficient amount to help the patient."

He added that the exclusion of certain drug uses "intimidates the headache practitioner and leaves him liable to malpractice suits."

Self-Help Units Win Growing Acceptance By Psychiatrists

Medical Tribune Report

CHICAGO—A survey of persons participating in group meetings of Recovery, Inc., a national self-help organization of nervous or former mental patients, has disclosed that more than one-third are attending the self-help sessions on the advice of professional counselors.

The influence exerted by referrals from psychiatrists, family physicians, social workers, religious advisers, and other professionals was reported by Dr. Hanus J. Grosz, Professor of Psychiatry, Indiana University School of Medicine, Indianapolis, following a survey of 6,463 members among 500 Recovery groups.

Dr. Grosz commented that acceptance of psychologic self-help by psychiatrists reflects a growing trend toward endorsement of groups run by and for persons seeking to overcome particular problems or to gain strength from mutual support so that they do not relapse.

Thirty-seven per cent of those surveyed were found to have been referred to Recovery, Inc., by a professional adviser. A psychiatrist's advice accounted for 20 per cent of these referrals.

In addition to the professional referrals, Dr. Grosz found that 23 per cent were referred by other Recovery members, 22 per cent by friends, and 15 per cent by relatives.

Obesity, Drinking Affect Diving

TOKYO—Overweight skin divers and those who drink heavily are more likely to suffer from air embolisms, medical researchers at the Kitakyushu Workers' Accident Hospital reported. Dr. Kou Hayashi said a study of 300 skin divers showed that 90 per cent of the overweight divers and 95 per cent of the frequent drinkers have a history of the bends.

...brief summaries of editorials or guest editorials in current medical journals.

Monitoring the Monitor

"The arrival of television tape recording is handy, color cassettes has aroused a blend of joys and fears in our profession. . . . Its ability to simplify publication of scientific data and facts has the power to make obsolete our conventional modes of scientific reporting. . . . The spectre of the hit and run pamphleteer, as free of editorial review as the maker of home movies, comes to mind.

"Properly used, the new tool . . . saves time in getting a message to an audience; a point can be made in a fraction of the hours that conventional writing requires. ". . . While trying to decide whether to be happy or just frightened by this new tool, **something must be done to protect us from a flood of hit and run mediocrity.**

"Specifically it will soon become necessary to establish professional review of these recordings. This will require the attention of our national and state societies." In the past these societies closely scrutinized physician-press relations to "prevent public confusion and self-advertisement." Unfortunately, that has stopped and, as a result, "in the public mind this has led to constantly rising expectations of cure. These have not been fulfilled. And they resent it. With the arrival of television tape cassettes the time has come to reassert a sensible control over this . . . process." J. O'Rourke, M.D., editorial. *(Eye, Ear, Nose, Throat Monthly 52:238, July, 1973.)*

Old Wine in New Bottles?

"In our scientific community 'new' is *the byword.* From some of our newer *scientists* rediscovery of some old—and some not-so-old—truths come to light every now and then. And some of the rediscovered 'old' is frequently viewed with suspicion such as formerly was reserved for the black-cat type of ideas.

". . . Medical scientists might well beware of becoming so engrossed with highly technical scientific pursuits that they lose sight of the central aim of medicine—namely the relief of suffering through prevention and treatment. Perhaps the inclusion of some of the not-so-scientific remedies—old, new or old-new—in our scientific armamentarium of therapy will turn out to be the outstanding contribution of some of our colleagues during these days of change. Maybe acupuncture will turn out to be one of these—even if the physiologists and anatomists, gross and micro-, are unable to come up with a provable explanation for its effectiveness." Editorial. *(W. Virginia Med. J. 69:128, May, 1973.)*

Rectal Cancer in Elderly

The average age for Danish patients with rectal cancer is 67 years. Forty per cent of the patients are over 70 years old, and we expect about 375 new cases in this age bracket every year. Experience has shown that the possibility for curative treatment exists in only two-thirds of these. In my experience, low anterior resection can be carried out in one-third of rectal cancer patients, and this operation is less risky than rectal extirpation. Unpublished results show that operative mortality among 95 patients in the ages 70-74 was 8 per cent (34 low anterior resection and 61 extirpation, with one and seven deaths, respectively). Only after 75 years of age does the risk rise appreciably. It is difficult to set a certain age as a risk limit.

Treatment of rectal cancer in the aged can consist of local elective coagulation therapy instead of rectal amputation, low anterior resection, or palliative colostomy. This limited therapy appears to have late results that compare favorably with other methods and has no primary operative mortality. Mogens Sprechler, M.D., editorial. *(Ugeskrift for Laeger [J. Danish M.A.] 135:22, May 28, 1973.)*

Equal Abortion Rights Are Urged for Minors

Medical Tribune Report

SAN FRANCISCO—The American College of Legal Medicine has urged equal rights for minors in an abortion resolution adopted at its 13th International Conference on Legal Medicine here.

The resolution asserts that the college's previous position on abortion is to be applied equally to minors and adults.

"In addition, where state law demands parental consent," the resolution says, "it is possible for the parents to effectively obviate the wishes of the pregnant minor. The college recommends that a procedure be established whereby a minor can seek the assistance and consent of the courts within a short period of time following the parents' adverse decision."

Court Decisions Cited

In another resolution the college cited "recent court decisions awarding damages to relatives of a decedent where an autopsy was performed as authorized by one relative but unknown to other relatives." It recommended, therefore, that "legislation be enacted to authorize any single relative, guardian, or legal representative of a decedent to consent to a postmortem examination and autopsy on a decedent's body for the purpose of determining the cause of death, for the advancement of medical or dental education and research, and for the general advancement of medical or dental science, provided that no person in a higher class exists or all persons in a higher class are not reasonably available at the time of death."

The college proposed that the priority of classes be as follows: (1) the spouse; (2) an adult son or daughter; (3) either parent; (4) an adult brother or sister; (5) a guardian of the person of the decedent at the time of death; or (6) any other person who has been authorized or is under legal obligation to dispose of the body.

The college also supported a resolution presented by Dr. R. L. Sadoff of Jenkintown, Pa., appealing to all elected and appointed officials to uphold the law to protect the privacy of all patients, and one offered by Dr. Herman Wing of Chicago, which stated:

"The American College of Legal Medicine condemns the infringement and encroachment on the confidentiality of physicians' records even in their private offices, resulting from government proposals and third-party intrusions. This is a violation of proper medical-legal principles of the doctor-patient relationship."

Review of Neurosurgery Training Is Planned

Medical Tribune World Service

TORONTO—A commission to review requisites for training neurosurgeons is to be set up soon by the American Board of Neurosurgery, the 64th meeting of the Society of Neurological Surgeons was told.

Dr. W. Kemp Clark of Dallas, Tex., chairman of an A.A.N.S. manpower study, said there will soon be 3,000 neurosurgeons in the United States, including 600 now in training. He noted that most members of the specialty are in their early and late 30s, with very few in the upper age ranges. Based on the present birth rate, Dr. Clark said, there will be one neurosurgeon per 50,000 persons by 1985.

His remarks came after Dr. William Sweet of Boston said a recent study shows that one neurosurgeon per 160,000 persons leaves no large unmet need.

When cardiac complaints occur in the absence of organic findings, underlying anxiety may be one factor

The influence of anxiety on heart function

Excessive anxiety is one of a combination of factors that may trigger a series of maladaptive functional reactions which can generate further anxiety Often involved in this vicious circle are some cardiac arrhythmias such as paroxysmal supraventricular tachycardia and premature systoles. Since these symptoms resemble those associated *with* actual organic disease, the overanxious patient needs reassurance that they have no organic basis and that reduction of excessive anxiety and emotional overreaction would be medically beneficial.

The benefits of antianxiety therapy

Antianxiety medication, when used to complement counseling and reassurance, should be both effective and comparatively free from undesirable side effects. Extensive clinical experience for more than 13 years has demonstrated that Librium fulfills these requirements with a high degree of consistency. Because of its wide margin of safety, Librium may generally be administered for extended periods, at the physician's discretion, without diminution of effect or need for increase in dosage. (See summary of product information.) If cardiovascular drugs are necessary, Librium is used concomitantly whenever anxiety is a clinically significant factor. (See Precautions.) Librium should be discontinued when anxiety has been reduced to appropriate levels.

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Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported *in psychiatric patients and hyperactive aggressive children. Employ usual precautions in* treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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On Death

A recent report in this newspaper noted that Sir MacFarlane Burnet, the 73-year-old Nobel Laureate, carries a particular medical card in his pocket. It is unlike the usual ones stating, for example, that the bearer is a diabetic. Sir MacFarlane's card reads: "I request that, in view of my age, any prolonged unconsciousness, whether due to accident, heart attack, or stroke, should be allowed to take its course without benefit of an intensive care or resuscitation ward."

Sir MacFarlane observes that modern medical science has become too successful in its ability to prolong life. He adds, "Once I reach the stage of pre-death, all I ask is that I go on to the end with as much dignity and as little pain as possible. Death in the old should be accepted as something always inevitable and sometimes *positively* desirable. Physicians *should not* compel old people to die more than once."

It is, of course, true that with modern resuscitative equipment and various supportive measures life can be prolonged or, perhaps more accurately, death can be warded off almost indefinitely, depending on the criteria of life and death. In a simpler past, and in the memory of many physicians, neither the equipment nor the measures were available, and death ensued in due course without any great ability to prevent or delay it.

And not so long ago most deaths occurred at home, rather than in the hospital, because the attending physician had judged hospitalization would be of no value. Aside from sudden death, most deaths now occur in the hospital. It is estimated that 80 per cent of Americans die within hospitals or other institutions. In a survey of all deaths during a three-week period in an area in Wales, Dr. W. Dewi Ress reported that of 50 people who died, 13 died at home, 26 in a general-practitioner hospital, four in a chronic sick unit, and seven in other hospitals. So, even here, only 26 per cent died at home.

It is with these developments—the availability of potent death-delaying measures, yet the final exit of most people occurring within the hospital—that physicians are being compelled to assess their roles as going beyond that of physicians or, in the dictionary definition, "persons skilled in the art of healing." Within hospitals and medical schools attempts are currently being made to direct attention to the dying. In the past, physicians have been reluctant to do so, often withdrawing from the dying because the experience has been personally too painful, too disturbing.

When the great jurist Oliver Wendell Holmes was 94 years old, he addressed the American people on radio. It was shortly before his death. His final words quoted Thucydides: "Death plucks at my ears and says, '*Live*, I am coming.'" Perhaps that means just what Sir MacFarlane's words do: "When the old reach a stage when they cannot cope for themselves, it is true compassion to bring that intolerable stage of pre-death to an end as soon as possible."

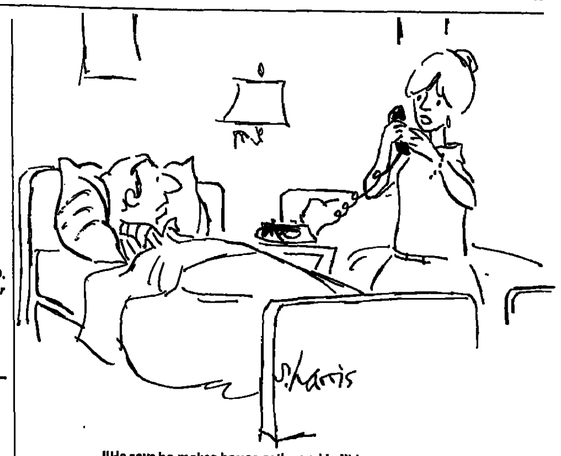
Dietary Punishment

THE COUNCIL ON FOODS AND NUTRITION has said it forcefully, but we think British House Secretary Robert Carr has said it best. Noting that British prisons will abolish bread-and-water diet punishments, the honorable cabinet minister observed that "dietary punishment is out of place in the 20th century." The A.M.A. Council, reviewing *Dr. Atkins' Diet Revolution* and other low-carbohydrate ketogenic weight reduction regimens in the June 4 issue of *J.A.M.A.*, made much of the misery of persons on such diets. Whether it is bread and water or strict avoidance of carbohydrates, we submit that all diets are dietary punishment

One of Webster's definitions of punishment is "to deplete in quantity, as food or drink," another "to control or to establish habits of self-control." No less is this true of the low-fat, low-cholesterol diet as espoused in the new *American Heart Association Cookbook* (ed. by R. Eshleman and M. Winston). Reviewer John L. Hess does not quite buy the cheery foreword of Dr. Campbell Moses, medical director of the A.H.A., who asserts, "This is not a diet book. It is a cookbook—a fun book for people who like to cook and to eat." But this is a description of French cuisine, the summit of Western cookery rather than of the low-cholesterol diet, Mr. Hess demurs, and anything less than that is a sacrifice, which is a voluntary form of punishment. The difference between the low-calorie diet, low carbohydrate or otherwise, and the low-fat, low-cholesterol diet is that one can learn to live with fat- and cholesterol-restricted foods whereas caloric restriction and weight reduction, by whatever method achieved, are difficult to sustain. R.S.G.

A Fluid-Filled IUD

CLINICAL QUOTE: *"Preliminary results of a relatively small number of clinical trials indicate that the new device is quite successful in reducing undesirable side effects. The number of expulsions and removals for bleeding have been encouragingly low; no pregnancies have resulted with the device in place; and patient reaction has been enthusiastic. On the basis of these results, which have been achieved without the use of drugs or chemicals of any kind, the clinical trials are being continued and expanded."* (Dr. Jack M. Futoran and Sotiris Kitrilakis, University of California School of Medicine, San Francisco, at the annual meeting, American College of Obstetricians and Gynecologists; see page 1.)



"He says he makes house calls, and he'll be over as soon as he gets his horse back from the blacksmith."

LETTERS TO THE TRIBUNE

Sickle Cell Confusion

Editor, MEDICAL TRIBUNE:

Your editorial of June 20, 1973, on "Screening for Hemoglobinopathies" correctly points out that such screening should be accomplished without making the bearers of sickle cell and similar traits psychological misfits and that education and effective counseling can avert this situation if proper techniques are used.

Dr. Hampton's study is of interest, but her implication that mass screening programs should be deferred is untenable. The health professions in most communities have been so tardy in carrying out education, screening, and counseling that they were beaten to the punch by the Black Panthers, who are hardly notable health professionals.

Since the cat is now out of the bag, health professions can no longer play ostrich. What is needed is an appropriate response to educate the public about the hemoglobinopathies and to screen and counsel them in an appropriate setting so that misunderstandings will be minimized.

The Metropolitan Seattle Sickle Cell Program is attempting to do just that, and it is questionable whether the 47 families studied by Dr. Hampton were counseled by counselors from the program. Prior to the institution of the Metropolitan Sickle Cell Program last year, however, the problem of confusing sickle cell trait with sickle cell anemia in this community was common. This related to the fact that people who were tested were not counseled or were poorly counseled by the other screening groups in the community.

MAX C. BADER, M.D., M.P.H.
Central District Health Officer
Seattle, Wash.

■

Evaluate the Drum

Editor, MEDICAL TRIBUNE:

In the June 6 issue of MEDICAL TRIBUNE, Dr. Bernard Berman's statements on the significance of allergic rhinitis as a cause for hearing loss in children are valid indeed. Secretory otitis media is a very common and damaging cause for hearing loss in children and is frequently secondary to an allergic rhinitis, as well as being an aftermath of eustachian tubal blockage secondary to hypertrophic adenoids so common with adenoiditis and tonsillitis.

I wish to differ somewhat with the statement that "every child with chronic allergic rhinitis should have repeated hearing tests." I object to the use of the word "repeated," as it helps very little therapeutically to test the hearing repeatedly. I would prefer to leave the impression that all children should have repeated hearing tests for screening purposes. When the hearing is impaired, this calls for an oto-laryngological evaluation to determine the cause.

It is more important to evaluate the ear drum and the status of the middle ear, preferably visualizing the ear with the high magnification of the Zeiss operating microscope as an office procedure, as this will reveal more accurately what is really going on with the ear and serves as a more meaningful follow-up procedure than to test the hearing repeatedly. One knows that the hearing may remain impaired as long as there is a *serous otitis media* in any stage.

Though periodic testing of hearing may be worth while to document progress in treatment, it is more important to test the hearing after the ear drum and middle ear have returned to a normal appearance, primarily to document that the hearing is or is not back to normal.

JAMES T. SPENCER, M.D.
Charleston, W. Va.

■

Screening Yes, But...

Editor, MEDICAL TRIBUNE:

The suggestion by Dr. Alfred Yankauer, reported in the June 6 MEDICAL TRIBUNE, that routine health supervision examinations of children by physicians should be eliminated in favor of periodic screening reviews has several implications which are not listed in your report.

Screening tests and the capability of nurse associates are both showing increasing sophistication; both are used increasingly by pediatricians; however, emotional problems, allergies, and developmental and learning disorders, among the most prevalent problems of children in this country, are poorly identified by either of these techniques. This has been well pointed out by Dr. Billie Crook.

The need for minute supervision of diet and routine control of infectious disease in early infancy has been greatly reduced; however, as more and more congenital and developmental disorders are amenable to treatment, the responsibility of pediatricians for careful, frequent, and detailed examination of the infant during his early months has not decreased.

There is a clear need to contain costs of medical care for children and use manpower efficiently; as has been pointed out by Drs. Michael Klein and Evan Charney, a most efficient way of doing this is by providing access to continuous and comprehensive health supervision which permits early diagnosis and treatment and decreases preventable hospitalization.

DAVID SPARLING, M.D.
Tacoma, Wash.

New Administration Health Plan to Take Hard Line on MDs

Continued from page 1

suggest that "the crux of the problem, to put it plainly, is that you have to keep the doctors honest and then the system will work."

Dr. Edwards replied, "I don't know that I would use the word 'honest.' . . . I think we have to monitor their use of medical technology, be it surgery or the utilization of other kinds of technology, and be sure it is being used both properly . . . and under the right circumstances."

Secretary of Health, Education, and Welfare Caspar W. Weinberger reported that the new national health insurance proposal, which he hopes to show President Nixon next month, is the result of a "searching re-examination" of the 1972 plan.

"It's far from final yet," he said, observing that two options currently receiving close attention are (1) a combination of employer-mandate coverage and federally funded catastrophic protection and (2) a national plan along the lines of the Federal Employees Health Benefits Program.

"Whatever system survives," Mr. Weinberger said, "any plan will include certain concepts. We will propose a partnership concept involving private insurance companies and public agencies, with the public interest and the Government's responsibility to the public, we hope, protected along the way, every step.

"We will assure that all Americans have access to basic comprehensive health insurance and that lack of sufficient income will not be a barrier to obtaining such coverage."

Would Reduce Cost Inflation

The plan will also include features "that will halt or reduce medical cost inflation and discourage overusage of health care personnel and facilities," he said, adding that "all intentions would be in vain if we have to sit by and watch the value of benefits provided quickly eroded by more inflation."

Noting the "sobering" fact that Medicare patients are now paying just about as much out-of-pocket costs for their health care as they were paying before the program was introduced, Mr. Weinberger went on:

"We believe that health care financing . . . should be able to be used as a lever to improve the distribution and supply of health care resources.

"We believe that reimbursement mechanisms must be structured so as to encourage the introduction of new concepts, such as health maintenance organizations, physician extenders, and paraprofessional personnel.

"We believe that reimbursement procedures should create new incentives for more efficiency and better quality—concentrate, in other words, on health maintenance rather than on just treatment."

In response to questions, Mr. Weinberger said the PSRO mechanism would be used to help prevent such abuses as "gang visits" as well as other tactics that have permitted "a very few" physicians to make very large incomes entirely from Medicare and Medicaid patients.

Reimbursement Mechanism Scored

"We have for too long, and in too many situations, been reimbursing health care providers for the exact amount of their charges, without anything near a critical examination of the necessity, the validity, or the propriety of some of those charges," he said.

Mr. Weinberger said past Government policies were to blame for encouraging—or, at least, not restraining—questionable practices, but a major effort is now under way to "remove any Government stimulus there might be to more health care inflation."

Picking up this theme later, Dr. Edwards said the most important issue is the need to develop a "national health strategy" that will bring the "vast resources" of the public and private sector to bear on the problems of rising costs, maldistribution, unequal access, and quality of care.

In sharp contrast with the conciliatory tone of his recent address to the American Medical Association meeting, Dr. Edwards enumerated a number of physician-related problems that the national health strategy might solve—and some that it could not.

One problem that will be addressed is the "so-called doctor shortage"—which is really a problem of distribution. The real problem, Dr. Edwards said, is that "there are not enough doctors providing primary care, while the number of specialists—general surgeons and the like—appears to be greater than necessary and even, for that matter, increasing.

"In addition, we are not making effective—I emphasize 'effective'—use of allied health care professionals," he said.

Some years ago the threat of a doctor shortage resulted in increased Federal aid for medical education. Medical school enrollment is up, and by the latter half of this decade between 9,000 and 10,000 new physicians will be graduating each year.

This increase will not, in and of itself, correct the shortage of primary care physicians or the oversupply of specialists, Dr. Edwards said, noting that we may end up with a doctor surplus.

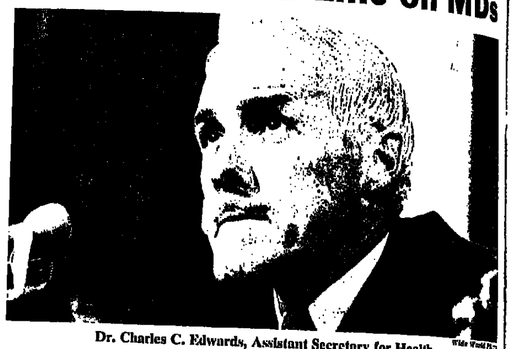
"If that were to happen," he said, "you might assume that physicians' fees would fall under the influence of normal supply-and-demand factors.

"I think the reverse is likely to happen. I think it already has happened. An excess of physicians, like an excess of hospital beds, tends to increase demand and certainly not lower it."

"We could be looking toward even greater inflation in the cost of health care as surplus doctors try to generate a certain amount of demand for their services," he said.

Dr. Edwards, a former surgeon, cited some "astounding" statistical comparisons between the United States and England.

"The number of full-time surgeons in the United States per 1,000 population is about 37.6 versus 20.8 in England," he said. "The number of operations per 1,000 population in the United States in 1969 was 73.2. In England it was 46.4.



Dr. Charles C. Edwards, Assistant Secretary for Health. Wide World Photo

"The number of tonsillectomies per 1,000 population in the United States was 6.3 compared with 3.3 in the U.K."

Dr. Edwards said that "if we launch a national health insurance system and fail to address this kind of utilization issue, I think we would be failing our responsibility very badly."

One of the problems that the Federal Government cannot handle by itself, Dr. Edwards said, is the misuse of certain drugs, particularly the antibiotics.

"Recent studies indicate that as many as 60 per cent of hospitalized patients on antibiotic therapy had no evidence of infection," he said. "Other studies suggest that about 30 per cent of the patients who see a doctor because of the common cold receive a prescription for one of the commonly used antibiotics."

"The problem here is not simply that these drugs will do the patient no real good," he went on. "They can do serious harm by promoting the growth of resistant strains of bacteria and an increased number of superinfections against which conventional antibiotic therapy proves ineffective."

Dr. Edwards said the FDA—of which he is a former commissioner—"provides physicians with accurate and complete information on drug usage, and I think it is improving in this regard.

"But it is plain that many physicians are not making proper use of this information, and if they were, we wouldn't be producing and certifying enough antibiotics each year to supply 50 doses a year for every man, woman, and child in the United States."

Asked About PSRO

Asked how he felt about A.M.A. opposition to PSRO, Dr. Edwards replied:

"Well, I am not so naïve as to think that the American Medical Association is going to fall in lock step and go down the road with us on PSRO without some major battles. They obviously aren't."

"I think, though, there are sufficient numbers of enlightened physicians in the United States that are beginning to recognize the fact that the medical profession has been practicing over these many years with little or no quality control," he said.

"I think that we are slowly bringing these people into the real world, which recognizes that we all—including those of us in Government—have a hell of a lot of people looking over our shoulder and providing a certain amount of quality control."

3 Nonsystemic Contraceptives Show Promise

Continued from page 1

moved intact, and no adverse tissue reaction, inflammation, or histologic changes were seen.

Citing clinical trials of such plugging conducted in India, Dr. Erb noted that antifertility efficacy has been achieved for as long as two years even though investigators there used a highly diluted, low-viscosity silicone polymer and simply filled the uterine cavity with this material.

A non-air-entraining mixer and dispenser devised by the Philadelphia team, he added, permits the use of higher-viscosity polymer systems. The advantages include prevention of intraperitoneal spillage, good conformation to the oviduct lumen, and higher tensile strength.

Dr. Erb said the development of a special obturator injection tip has been another factor in the success of the Philadelphia experiments. The tip's structure facilitates delivery of the polymer into the fallopian tube without significant backflow into the uterine cavity. Also, the tip detaches from the insertion device and remains in the uterus, bonded to the cured oviduct plug.

For use in women, the tips would be fitted with loops or other means of attachment to allow for transcervical removal and thus permit reversibility of the contraceptive sterilization.

Coauthors of the report were Robert H. Davis, Ph.D., and Drs. George A. Kyriazis and Howard Ballin.

A new intrauterine device, consisting of a soft pouch that is inflated with sterile saline after insertion, has been developed by Dr. Jack M. Futoran and Sotiris Kitrilakis, of the University of California School of Medicine, San Francisco.

The pouch has no sharp edges or points to irritate the uterus, Dr. Futoran pointed out. And the postinsertion inflation means that the device is, in effect, custom-fitted, he said.

A total of 207 women, more than half of them nulliparous, have been fitted with the device for a total of about 600 months of exposure. No pregnancy has occurred with the device in place.

Five of the devices have been expelled and five others removed because of bleeding and/or pain during the trials, which have provided an average follow-up time of three months. Most problems with an IUD become evident within the first three months, Dr. Futoran commented.

The investigators emphasized that their results must be considered preliminary because of the relatively small number of patients. They believe, however, that the incidence of expulsions and removals has been "encouragingly low," especially in a study sample that includes many nulliparous women, and they say that patient reaction has been "enthusiastic."

A second adaptation of the intrauterine device—one that delivers very small doses of progesterone—was described by Dr. Antonio Scommegna, of the University of Chicago Pritzker School of Medicine.

This local administration of progesterone in minute amounts induces decidual changes in the endometrial receptor that make it unsuitable for implantation, but the hormone does not have systemic effects, Dr. Scommegna said.

The vehicle used in the clinical trials has been a small, T-shaped device, the so-called Tatum T. It has a low expulsion rate and seldom causes bleeding or pain but is associated with a relatively high pregnancy rate.

Dr. Scommegna called the results so far achieved with the progesterone-releasing device "quite encouraging." No pregnancy has occurred while a device releasing adequate amounts of progesterone was present in the uterine cavity.

The rates of expulsion and cervical displacement, as well as the incidence of removal for medical or personal reasons, were higher than those reported for the regular T device. But Dr. Scommegna noted that repeated removals and insertions probably contributed to this increase. The experimental device had a useful life of only six months because of gradual hormone release.

Further factors influencing removal were the endometrial biopsies and other procedures required by the study and the prevalence of pelvic inflammatory disease in the study population.

Associated with him in the study were Drs. Theresita Avila, Manuel Luna, Ramma Rao, and W. Paul Dmowski and B. Kulkarni, Ph.D.

Medical Tribune

HYPERTENSION BULLETIN

A CIBA SERVICE

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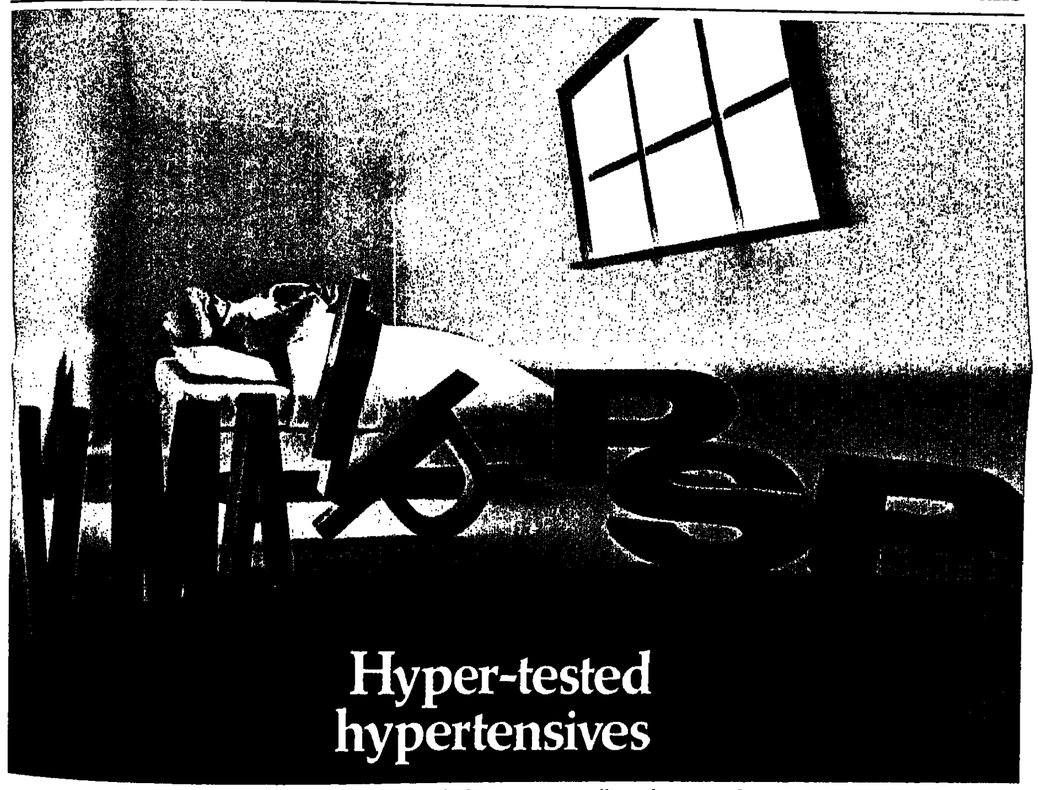

Hyper-tested hypertensives

THE COMMON PRACTICE of doing the big work-up on patients with mild to moderately severe hypertension is all wrong, says Dr. Marvin Moser, a White Plains, N.Y. cardiologist to whom Manhattan nephrologists often send patients when they can't get blood pressures down to satisfactory levels.

"For the past 15 years, many physicians have been looking mainly for the esoteric, the unusual. They hospitalize the patient, searching for the three to five per cent who have fascinating complications. That may be much more interesting scientifically, but it's not real therapy.

"The real therapy begins with a blood pressure cuff and pills, not with elaborate testing, not with IVPs, VMAs, P5Ps and all the rest of the diagnostic alphabet soup. I'm talking about something as simple as a diuretic three times a week to start, or a diuretic combined with a tranquilizer, rauwolfia, or a barbiturate. Later on, the use of higher dosages and other drugs may be necessary. Not very glamorous. Won't get you published. But it will help you help your patients and may make a dent in the enormous morbidity due to hypertensive disease."

From 1958 to 1971 Dr. Moser, who is the author with Dr. Arthur Goldman of *Hypertensive Vascular Disease*, was physician-in-charge of the hypertension service at Montefiore Hospital and Medical Center in New York City and he still serves the hospital as an associate attending in medicine. He is also chief of cardiology, White Plains Hospital, consultant

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in cardiology to the State Department of Health, and Assistant Professor of Clinical Medicine, Albert Einstein College of Medicine.

Dr. Moser consistently treats patients whose repeated blood pressure readings are as low as 140/90, especially if they are under 40 and if there are the risk factors of familial history of early coronary or hypertensive disease. He even treats patients in the 40-60 age group whose pressures are in the 145-150/90 range.

"Let's take a man of 50, with a blood pressure of 150/95 and an uncle who died at 55 of a stroke. I would probably not treat him at once, but would ask him to come back in three to six months. If the pressure were then above 150/90, I would start him on 50 mg. of hydrochlorothiazide three times a week, possibly combined with a rauwolfia preparation, unless he had a history of depression or appeared to be a highly anxious person.

The real therapy begins with a blood pressure cuff and pills, not with elaborate testing.

"Now suppose him to be obese. I would get him to lose weight, but I would know that this is only likely to control blood pressure if it is mildly elevated. A lot of physicians, I think, rely too much on that notion in severe cases and neglect treatment. The fact remains, however, that obesity is another risk in heart disease. If his cholesterol were high, I'd try to correct that, and if he smoked two packs of cigarettes a day, I would go after that, too. These are all peripheral to hypertension, but contributors to coronary disease."

Dr. Moser does not see a patient frequently unless his hypertension is both severe and refractory. And further: "No scare tactics, no telling him his heart may give out or his kidneys may fail or a stroke may result. I think when someone finds out he has high blood pressure he is frightened enough. Everyone knows someone or of someone who had a stroke.

As a member of a joint American Heart Association-American College of Cardiology Self-Assessment Study Group on Hypertension, Dr. Moser is sold on the idea of a "cookbook" approach to treatment of mild to moderately severe hypertension.

"I know that some people object to the 'cookbook' concept. They think they are not individualizing treatment, but our experience pretty conclusively shows that about 60 per cent of all mild to moderately severe hypertensives will respond to thiazide and rauwolfia in medium to full doses —up to 100 mg. of each per day. That's a pretty high percentage. It means that if we screened the whole country and found eight million more such hypertensives, almost two thirds of them could be successfully treated by the so-called 'cookbook' prescription."

For such patients, Dr. Moser's plan of therapy is placid, and persistent. He is going to get that reading down, but he is not going to disrupt the patient's customary way of life in the process.

"I don't believe that all hypertensives, or even 20 per cent of them for that matter, should have elaborate work-ups. I don't think they should be in hospitals. I feel very strongly that the vast majority of hypertensives who are lying in hospitals for work-ups don't belong there."

This does not apply to patients with malignant hypertension, of course. They belong in the hospital for emergency treatment.

"That is the patient with a diastolic of 130-140 plus, with headaches, dizziness, failing vision, nausea, vomiting, with albuminuria, red cells, casts, and so forth. He may have an enlarged heart, left ventricular hypertrophy, and ischemic changes. He may have fibrinoid changes in the arterioles of the kidney, and papilledema, hemorrhages and exudates on examining the fundi.

When Dr. Moser needs to consult about a particularly tricky problem he turns to his American Indian kachina associate for guidance and inspiration.

House academicians

"These people obviously should be in the hospital, but not for a work-up. There's time for that later. Just get the pressure down. It doesn't matter what caused the elevation.

"One of the things that used to happen often was that the patient would come in with this syndrome, and the very academically oriented house staff would immediately start an elaborate study to determine why he had malignant hypertension, instead of just knocking the pressure down and a week later doing studies to see if there really were some ascertainable cause, like pheochromocytoma or renal artery disease."

In his book, *Hypertensive Vascular Disease*, Dr. Moser firmly insists that immediate hospitalization is unnecessary, even for the patient with more severe hypertension.

"Let's say I have a patient of 45 whom I saw with 170/110, and his ECG showed some left ventricular hypertrophy, but his urine was negative. After a month on thiazides and rauwolfia, let's say his pressure is now 180/115. After adding hydralazine in gradually increasing doses—something the patient can do—he comes back in three or four weeks with a pressure still at 180/115. So I push hydralazine up to 200 mg. per day, which is about where you want to end up. He is now on 100 mg. of thiazide, 100 mg. of rauwolfia or .25 mg. of reserpine, and 200 mg. of hydralazine daily. He's not responding, so I add guanethidine, starting with 12.5 mg. a day. It's necessary to see him more often with this drug, so in a week I find his pressure is 190/120 and he shows a little albuminuria. On 50-75 mg./day guanethidine, plus the other drugs, blood pressure remains high.

"By now it's clear that this is a patient who has to be investigated for a possible renovascular lesion, a narrowing of one or both renal arteries. In a man this age, the most common cause would be an arteriosclerotic plaque that you hope will be in the renal artery, just where it comes off the aorta, so that surgery can be effective. In a young woman, you might find a different kind of lesion—a dysplasia of the media or intima of the renal artery. These lesions are frequently not amenable to surgical repair."

But such situations are rare, and Dr. Moser does not work up patients for renovascular disease unless the disease is progressive, non-responding, or accelerating. However, he believes that every hypertensive under 30 should be worked up, because that is where the yield really is in the search for abnormalities.

The remainder, he treats at once, after giving a basic, baseline examination: An ECG indicates possible heart involvement as a target organ. A simple urine, if negative, rules out renal parenchymal disease. PSP tests and creatinine clearances are unnecessary.

"These tests are nice from an academic point of view, and I think interns and residents ought to learn about them, but from a practical standpoint we don't need them. A BUN and a urine will tell you as much as you really need to know to begin treatment of all but the malignant or severely progressive hypertensives. We have a serious public health problem with *untreated* hypertensives and we will not begin to solve it unless we simplify our approach!"

Even where there is kidney damage, as evidenced, say, by a BUN of 25 to 35 mg. per cent or a creatinine of 1.5 to 2.5 mg. per cent, there is no reason to withhold antihypertensives.

"I have seen a fair number of people both in private practice and at Montefiore who started out with evidence of kidney insufficiency—BUNs of 30 and 40 mg. per cent and creatinines of 2, 3 or even 4 mg. per cent—whose function has remained stable for five or more years following effective antihypertensive treatment.

A BUN and a urine will tell you as much as you really need to know to begin treatment of all but the severely progressive.

Dr. Moser recalls only two patients in whom a creatinine of over 4 mg. per cent came down toward normal after treatment, and adds that there are some investigators who have reported more frequent improvement in kidney function.

He explains this phenomenon in terms of the effect of hypertension on target organs. High blood pressure, he believes, can be regarded as simply a mechanical burden on the heart as a pump and the blood vessels of the kidney and brain, whatever the cause of the elevation.

"If you can take away this mechanical insult, this added blood pressure, you have eliminated a major factor in the etiology of vessel disease in these major target organs."

The fallacy persists, he says, that as you lower blood pressure, you reduce blood flow to the kidneys, decrease glomerular filtration and cause further kidney damage.

"This is true — temporarily, especially with drugs like guanethidine, which act by dilating the veins, reducing venous return to the heart, thus decreasing cardiac output. When cardiac output falls, so does the flow to the kidney. With such drugs you frequently see rising BUN levels, indicating less blood flow to the kidney as the pressure comes down.

I don't believe that all hypertensives, or even 20 per cent of them, should be in hospitals.

"House officers are fond of making charts showing the patient's blood pressure coming down and the kidney function getting worse.

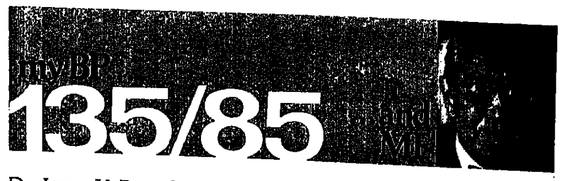
" 'What are you doing to this poor fellow?' they would ask us during rounds. The answer to that is, that if you drop the blood pressure of patients with renal insufficiency carefully, and if you persist in treating them, the BUNs will first rise and will then come back down to pretreatment levels and stay there. After a month to six weeks, as blood pressure comes under control, the BUN and creatine levels will come back down."

By far the greater danger in such patients is inadequate treatment, Dr. Moser says. He cites a man in his early 50s with diastolics of 140-150-160, heart failure, a creatinine of 6 mg. per cent, and retinal hemorrhages.

"You knew very well that by lowering his pressure you were not going to prolong his life indefinitely, because his kidney function was too far gone. Treatment proved to be more than just palliative, however. This man has been on therapy about a year and a half. His creatinine is still six to seven, his BUN is 90 to 100. He is obviously losing ground in renal function, but he has had 18 months of pretty good health. His fundi are free of hemorrhage; he's out of heart failure; and he's going about his business.

"I like to think that, if he had been treated five years ago, this never would have happened at all. The sad part of the story is that he had been seeing a doctor all along, but unfortunately he had been given totally inadequate therapy.

"This case is characteristic of something you see frequently: the patient whose doctor is aware that the hypertension ought to be treated and therefore uses a drug, or even two or three drugs, in inadequate dosage. The doctor goes to bed at night feeling very comfortable. He is treating his hypertensive patient, but he is not treating him to end-point." ⓘ



DR. IRVINE H. PAGE, director emeritus of research at the Cleveland Clinic, and the man who led one of two research teams that separately reported the discovery of angiotensin in 1939, took his own blood pressure for years, but now he has given way and has another doctor check him once a year. Dr. Page, at 72, says his pressure holds at about 135/85, partly because of a "reasonably good heredity".

He jogs, plays tennis and, "to the great distress of friends," walks and walks. He began to "monkey around" with low fat and low cholesterol intake in the 1940s, but did not give up alcohol. Smoking he did stop, after 50 years.

He has never been convinced that stress alone can cause high blood pressure (see his article: *Hypertension Bulletin*, June), but sees the issue as irrelevant in his own case, since "things don't really stress me terribly". ⓘ

reports from abroad

HELSINKI—The results of a serum lipid and lipoprotein study at the University of Helsinki by Drs. Isko Nikkilä and Antti Aro suggest a familial trait of hyperlipidemia in one-third of families in which one member had suffered premature coronary heart disease.

Of the 101 families examined, hyperlipoproteinemia was prominent in 33 and only nine of these had a single-type disease. Familial hypercholesterolemia (type-IIa) was found in six families. Abnormal lipoprotein phenotypes coexisted in 24 families, with half the members affected. Phenotype IIb was six times more common in the first-degree relatives of myocardial infarction survivors than in a control population.

JERUSALEM—*Profound salt wastage found in seven children with very high plasma-renin activity and normal or high plasma-aldosterone levels may be explained,* said Dr. A. Rösler, Hadassah University Hospital, by the non-responsiveness of the renal tubule to aldosterone. The patients responded to heavy dietary supplements of salt.

DUNDEE, SCOTLAND—Patients with chronic renal failure on maintenance hemodialysis "may be subject to a dangerous combination of symptomless duodenal ulceration associated with severe, prolonged hypersecretion of acid" that may be a consequence of the renal disease or its treatment by hemodialysis, report Drs. A. M. M. Shepherd, W. K. Stewart, and K. G. Wormsley, of Maryfield Hospital.

They found very high overnight and basal gastric acid secretion associated with duodenal ulcer in 53 per cent of 15 patients with end-stage chronic renal failure. They suggest that all such patients on hemodialysis be monitored for spontaneous gastric hypersecretion, so that proper therapy can be initiated.

Artist of medicine

THE ACCOMPANYING ILLUSTRATION, taken from the just-published Volume 6—Kidneys, Ureters, and Urinary Bladder—of THE CIBA COLLECTION OF MEDICAL ILLUSTRATIONS, typifies the in-depth presentation of subject matter that has been characteristic of all the "Netter Atlases". Their illustrator, Dr. Frank H. Netter, received his medical degree from New York University School of Medicine in 1931. He was already well known as a medical artist when the CIBA COLLECTION was initiated in 1946.

The CIBA COLLECTION to date includes the following volumes: Nervous System; Reproductive System (both male and female); Digestive System (three volumes on the upper and lower digestive tracts and liver, biliary tract, and pancreas); Endocrine System and Selected Metabolic Diseases; Heart; and, of course, the book on the kidneys.

"Our knowledge of kidneys has expanded so rapidly in the last ten to fifteen years, due largely to the electron microscope," said Dr. Netter, "that we felt obliged to present the kidneys pictorially in the newest volume. Our understanding of kidney function has been so amplified and there have been so many therapeutic advances, such as dialysis, that we had a particular incentive for this undertaking.

Emphasis on hypertension

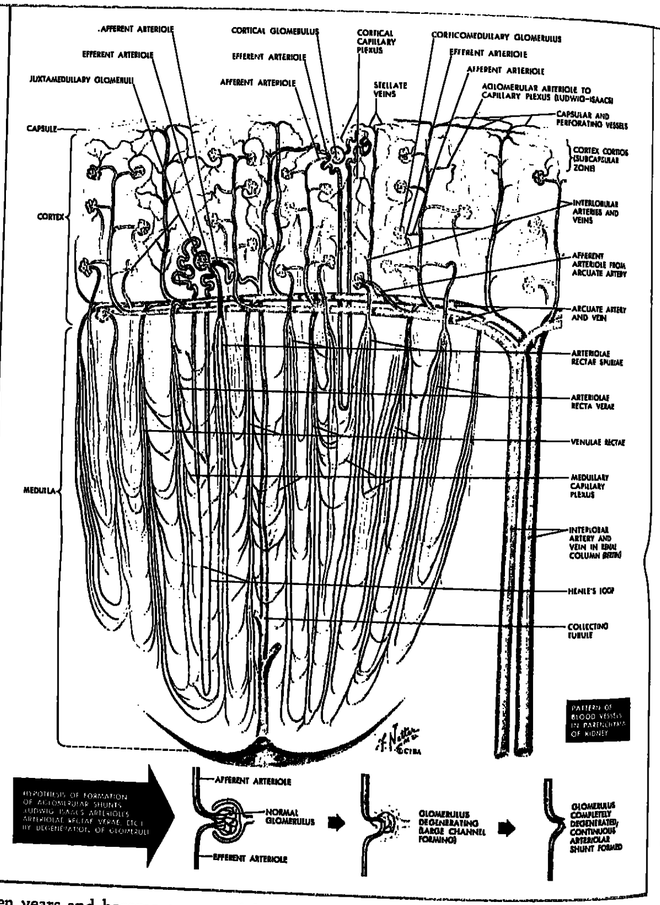
"Because the relationship of the kidneys to hypertension is very fundamental —though we still don't know which came first, the hypertension or the kidney disease—we have delineated kidney function in relation to hypertension in many of the illustrations.

"But many other aspects of kidney disorder are also covered here, as they are in Volume 5 on Heart, in which the section on kidneys in hypertension demonstrates graphically the morphologic changes in essential hypertension, and renal lesions in malignant hypertension, which are often so extensive as to make renal failure one of the common causes of death in untreated cases."

Dr. Netter hopes some day to complete the CIBA COLLECTION by doing all the systems of the human organism, "if I live long enough and retain my faculties and ability to work".

How did he, a surgeon, happen to become a medical artist, rather than a researcher or clinician? "Well," said Dr. Netter, "if someone had told me when I was a young boy that I would study art for ten years and become a successful commercial artist, and that then I would give up the whole thing and spend another fifteen years going through college, medical school, internship and residency, subsequently to combine all this training with art, I would have said, 'You are crazy!' But that is exactly what I did, though I never planned to be a medical artist; in fact, I believed I was through with art when I started to study medicine.

"When I was just a kid I loved to draw. While still in high school, I would spend afternoons and evenings at the National Academy of Design. When school work began to suffer, my mother asked where I went after school and I told her I was going to art classes. 'Well,' she said, 'art is very nice, but not a good way to make a living.'



"She told me about the evils of the artist's life—drink, carousing, nude models. It didn't sound too bad. Anyway, I promised I would do better in my school work, so she let me continue at art school. Eventually I became a commercial artist, and drew girls for calendars, did magazine illustrations, even type design and layout. This was during the booming 1920s, great days for the commercial artist, because photography wasn't used much, radio was in its infancy, there was no TV. The artist was the darling of the advertising world.

"But my family still felt that I should do something more serious, so I went back to college to become a doctor. At medical school my notebooks were full of pictures, because I was trained visually, and that's the way I could learn. After seeing my drawings, some of my professors asked me to illustrate their books and articles, which I did, just to get on their right side at first; then, when funds ran low, I drew pictures to earn money.

Art to pay rent

"By the time I was ready to go into practice, the country was in the depths of the depression and there was no practice for a young surgeon. So, in what I considered a temporary expedient to pay rent until my practice could get off the ground, I drew more and more, and the demand for my illustrations grew faster than the demand for my practice. When I finally had to decide just how I would make my living, I decided to continue illustrating."

One of the most interesting, though arduous, projects ever undertaken by Dr. Netter was construction of a 7-foot-high "transparent woman" for display at the San Francisco Golden Gate Exposition.

"Creation of that woman—she was kind of vicious—almost killed me. It was a terrible job. We worked day and night on it for about eight months. Not only did I model the figure, which was the easiest part, because I had studied sculpture and had a couple of boys to help me, but then had to fit the mechanical and electrical devices inside the model, so that lighting effects and a voice telling the story of endocrine function could be synchronized."

Asked whether he has trained someone to carry on his work, Dr. Netter said that on occasion he has had people working under his guidance. "Frankly, though, I don't have the temperament to guide and teach. I prefer to do the work myself, and usually end up by doing it anyway, because most of my work is not merely painting, which is by far the lesser part. The important part is in studying to understand a subject thoroughly before starting to illustrate, so that I can record the *essence*, not merely the existence of, for example, a pathologic condition. Then, I may make 30 or 40 different sketches. Sometimes I'm able to present a subject clearly right off the bat, and don't need that many sketches.

"My wife often asks me when certain pictures were done, and I say, 'Oh, while lying in bed'; or, 'On the golf course.' These are the times when I actually do my thinking and planning, the hardest part of my work. Illustrations must transmit an idea, not merely be realistic, like a photo or possibly emotional, as a painting may be. Drawings may become very graphic, schematic sometimes, particularly when depicting certain functions, such as those of the kidney, which is largely a chemical organ, in contrast with the heart which is a mechanical organ, a pump. I try to illustrate *in depth*, to present subjects as they would appear to the mind, as a teaching device, though I don't like the word teaching, because sometimes we are just presenting thoughts and ideas, not teaching.

The important part is in studying to understand the subject, to record the essence of it, not merely the pathologic condition.

Pictures define the words

"Let me relate an incident to illustrate how my work on the gastrointestinal system led to an *in depth* presentation. I started in my usual manner by studying the literature, with which I was already pretty well acquainted. However, the more I read, the more confusing the subject seemed, because so many of the same words mean different things. But the writings of a Professor of Anatomy at the University of Manchester, England, had impressed me, and I felt I had to talk to him before I could proceed. So, I wrote to him, he invited me over, and I spent three days with him.

"Several months later, after I had completed my illustrations, this professor was in the U.S. and phoned me. I was delighted to hear from him, and invited him to my studio. For the first ten or fifteen minutes he just looked at my drawings and said nothing. I became apprehensive, thought I had made some terrible mistakes and that he was too embarrassed to tell me about them. But, I was wrong.

"When he finally looked up, he said: 'Though I know everything you have presented in these illustrations, in fact, I believe I described most of them to you, *seeing them depicted graphically gives me a whole new concept of the subject.*' "

Young students often seek Dr. Netter's advice about how to become a medical artist, and the first question many ask is: What sort of brushes, or paints, or paper, or canvas should I use?

"I say, Well, I can tell you all about these implements of the trade, but they aren't going to help you become a good medical artist unless you first learn that you are trying to transmit ideas, clarify thinking, not just paint technically accurate pictures."

Dr. Netter believes that anyone can draw, and that medical students should be encouraged to illustrate things as they learn, because graphic presentation is an aid to logical thinking.

"I think it is very unfortunate that many young people are told that they cannot draw. Teachers who often don't know very much about art themselves often tell a child he has no talent, so he becomes convinced he will never be able to draw. I don't think this is true, though some people will do better than others. It is almost instinctive to draw, and I believe all children love to make pictures, just as my little granddaughters do. Some of the things children draw before they are subjected to negative influences are extremely attractive." ⓘ

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early, effective
control of hypertension
can save lives

Mechanics of stress

SALT AND HEREDITY have roles in the development of essential hypertension—but, says Dr. James P. Henry, of the University of Southern California School of Medicine, Los Angeles, they may be subject to the modifying influence of psychosocial factors. He cites studies done with his associates and by other groups in support of this premise.

Dr. Henry postulates that the rise in blood pressure with age may be an expression of chronic activation of "defense" and "alarm" responses which follow breakdown of the "coping processes" by which an ordered social group protects its individual members.

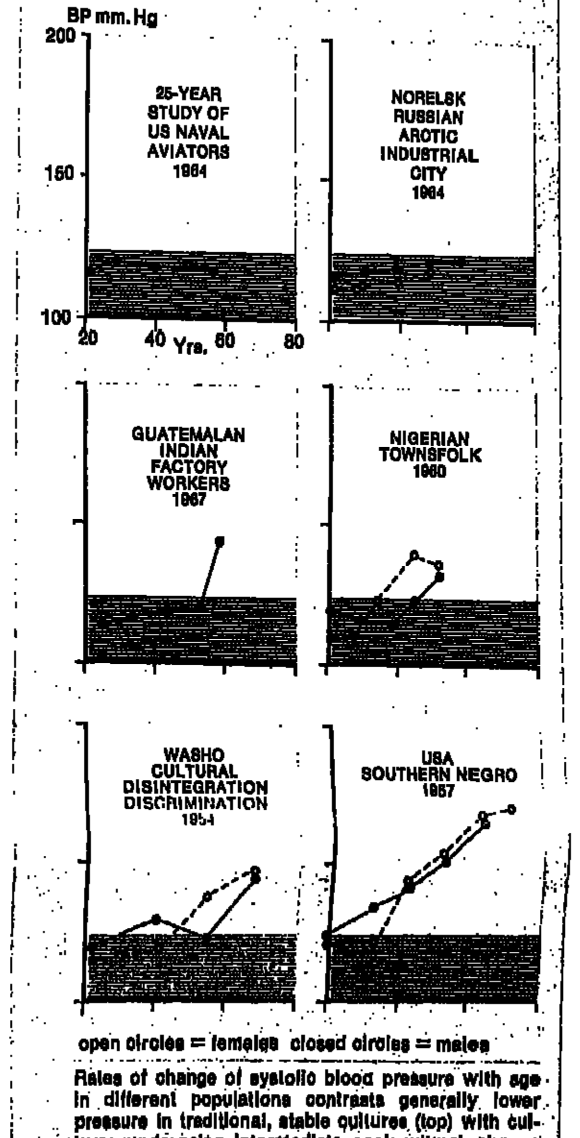
Studies of psychosocial factors in disease "increase the attractiveness of the view that the defense and alarm reactions may be [the] neurohumoral link between unfulfilled social needs and the development of high blood pressure.... There is evidence that by acting repeatedly over the years, *this* defense reaction will lead to a *chronic* elevation of systolic arterial pressure in the majority of the members of a disturbed social group."

The defense reaction, which includes activation of the sympathetic system and the classic alarm or Selyean adrenocortical response, involves mechanisms of the hypothalamus. Their repeated arousal occurs when behavior sanctioned during the critical early learning periods is no longer appropriate to express normal urges.

The biochemistry obscure

Difficulties in meeting the demands of the environment may cause chronic disturbance of vascular, autonomic, and hormonal functions, and eventually provoke irreversible changes, such as fixed hypertension, cardiac ischemia and cerebrovascular disease. The biochemical action by which this repeated psychic provocation leads to hypertension is obscure. The catecholamine synthesizing enzymes in the adrenal medulla may increase and the cortex may hypertrophy, and under these circumstances catecholamine excretion and 17-hydroxycorticosterone output may increase.

Studies in other laboratories support the theory of a central role for the psychologically significant fight-or-flight response in essential hypertension. Stimulation of the lateral hypothalamus in the experimental animal induces the defense alarm system. But when animals are exposed to mild stimulation of short duration (10 seconds) through an electrode implanted in the lateral hypothalamus, they show signs of alertness without the appearance of the violent symptoms of fight or flight. When such mild alerting stimuli are repeated over and over for days and weeks, the animals develop moderate, sustained hypertension.



Rates of change of systolic blood pressure with age in different populations contrasts generally lower pressure in traditional, stable cultures (top) with cultures undergoing intermediate sociocultural change (middle), and those subject to increasing stresses (bottom). (From: Henry, J. P., and Cassel, J. C.: *Am. J. Epidemiol* 90:171, 1969.)

There is evidence of such mechanisms in man. A classic study involves men presented with an arithmetic problem to work out "in their heads" while they were harassed by the ticking of a metronome. They developed a syndrome typical of the defense alarm state, including elevation of arterial pressure, increased heart rate and (often) cardiac output, increased blood flow to muscles and a radically reduced blood flow through the gastrointestinal tract and kidneys.

The defense reaction leads to chronic elevation of systolic arterial pressure in disturbed social groups.

Epidemics of high blood pressure resulting from exposure to repeated stress occurred in soldiers who took part in the siege of Leningrad during World War II, and again, in an armored battalion of seasoned soldiers during the desert war in Libya. Over 30 per cent of the latter group had blood pressures of 180 mm. Hg systolic or higher. Within two months, most of this neurogenic hypertension was returning to normal.

In contrast, American doctors and nurses in two different mission hospitals in China during the 1920s had a significant decrease in casual systolic blood pressure over their stateside values. It was suggested that this may have been influenced by the less frenzied Chinese environment, a decreased anxiety level, and satisfaction in their work.

Asked whether he could define the characteristics of the person who is psychically hypertension-prone, Dr. Henry said: "A theory proposed at a recent symposium on Physiology, Emotion and Psychosomatic Disease suggests that such people are out of touch with their autonomic and limbic systems, that they have a deficiency in affect and fantasy. Perhaps when this deficiency results in a failure to be fully cognizant of the feeling of frustration and *hostility experienced when things are not going the way these individuals* have been brought up to believe they should, their defense and alarm mechanism may lack the proper modulation by coping controls, and respond too much and too long. Constant repetition of such excessive responses to conditions imposed by society could eventually result in sustained blood pressure elevation and pathophysiologic changes."

Population differences

The relationship between blood pressure and psychosocial stress is illustrated in the graphs showing the distribution of casual systolic blood pressure in various human populations. The top row shows findings among people well adapted from childhood to their adult lifestyle. Many still retain their traditional ways of life, undisturbed by social and technologic revolution. Blood pressure shows practically no major increase with age. The naval aviators in this group (top, left) who may be considered by some to be exposed to constant stress, were actually a select group chosen because of their thorough adaptation from youth to the demands of a technologic society.

The bottom row represents groups exposed to increasing socioeconomic pressures, and shows sharp increases in blood pressure with age. The blood pressure range of the middle series represents groups subject to intermediate levels of sociocultural change and stress, within which some traditional ties are retained, though members of the groups strive to adjust to changing conditions.

Dr. Lewis and the dialyzor cartridge

No-pump dialyzer

"The new Markley dialyzer has two important advantages over most others now in use," says Edmund J. Lewis, M.D., director of the University of Chicago's Hemodialysis Unit, where the new artificial kidney is being tested clinically.

"The first is its compactness. At any given time, there are only about 25 cc of blood in the dialyzer—and therefore outside the body—and I think this benefits the patient, particularly the one who is on home dialysis.

"The second advantage, a consequence of the first, is its greater safety over other dialyzers. A majority of our patients will be able to use this unit without a pump, the heart serving as the pump, which simplifies the procedure considerably. The great danger in home dialysis has always been the possibility of a severe blood loss in the event of accident.

"During dialysis, between 300 and 400 cc of blood a minute are pumped out of a patient, and if warning mechanisms remain imperfect, as they are now, the pump may continue to work even when there is a disconnected line, or a ruptured membrane that no one notices.

"But even aside from that hazard, there is a certain amount of trauma to the blood as it goes through the pump. I think patients who are able to use the dialyzer without the pump somehow feel better when the blood flows at its own rate."

Physicist Finley Markley, who developed the new dialyzer at the Argonne National Laboratory in collaboration with University of Chicago physicians, contributed the first departure in dialyzer design when he learned how to bond Cupophran, the very fine cellophane used as a membrane in most dialyzers, so that it would be impervious to water.

"This dialyzer has 60 pleats on one side and 61 on the other," said Dr. Lewis. "The blood flows along one side of the pleats while the dialysate flows along the other. The thinner the film of blood you have, the more efficiently molecules of urea and creatinine can move through the cellophane, because they're always in very close contact with the dialysate on either side. That is the key to why this dialyzer is 30 per cent more effective than any others now in use."

Whether a patient will be able to use the Markley unit without a pump depends on the size of his blood vessels and the kind of access available to the vessels. Until recently, the university's Hemodialysis Unit had been using two standard types of arteriovenous shunts. The first, the Scribner shunt—a plastic shunt that comes out of the skin in connection with

Patients who are able to use the dialyzer without the pump somehow feel better when the blood flows at its own rate.

the vessels, forming an A-V cannula—is losing popularity because of associated infections, and because of its restraints on patients. They can't swim, and they must be very careful when they bathe.

However, the Scribner shunt can be used with the Markley dialyzer without a pump, because access to the vessels is simply a matter of disconnecting shunt leading between the artery and the vein and plugging into the machine.

The second type of shunt is the so-called internal arteriovenous fistula. To create it, a surgeon connects an artery and a vein in the arm subcutaneously, producing direct communication of blood. The veins become much larger because the artery is feeding them directly rather than going through the capillary bed. Access is made by inserting a needle into a vein in each arm, the shunted one furnishing the arterial supply, the other supplying venous return.

Infection infrequent

"This is the most convenient kind of access for most patients. It involves no foreign body, no tube coming out of the skin. After a while, they don't mind the insertion of the needles for each dialysis. Many of them do this themselves. But the blood flow we get for the arterial supply is usually not high enough in volume to run the dialysis without a pump."

The unit is now using another approach, the Thomas shunt, which Dr. Lewis believes will make it possible to use the new dialyzer without a pump. The Thomas shunt involves surgical implantation of dacron grafts into a major artery and vein, either in the axillary or femoral area. Each graft is then extended down, to emerge through the skin of the arm or the leg. The larger vessels provide a higher volume of blood supply.

Infection, while still a possible source of trouble in this external access, seems to occur infrequently, probably because connective tissue tends to interpenetrate and seal off the dacron webbing that covers the fistula.

"We have about 35 patients on dialysis now, most of whom are between 20 and 35 years of age and have chronic renal failure. The typical patient has a history of untreated, or only intermittently treated, hypertension, and developed severe symptoms suddenly, followed by rapid deterioration of kidney function to the point of renal failure and the need for dialysis."

Drop-outs from care in the hypertension clinic are a problem. Some patients just stop taking medication when their blood pressure drops. Even some with renal failure and the ultimate motivation who understand fully the nature of their illness, can find it difficult to maintain the regimen.

Dr. Lewis feels that these patients could have avoided catastrophic illness if their hypertension had been controlled consistently from the start. "I don't mean to indict the patients. There is nothing in the histories we've been able to elicit that contradicts the possibility that physicians failed to prescribe, or that they didn't direct patients to stop medication once blood pressure had been brought down to normal. The situation simply highlights the enormous need for nationwide patient *and* doctor education.

"If a patient is doing well on dialysis—psychologically, vocationally, and physically—he has a better than 90 per cent yearly chance for survival. The majority of our patients on dialysis are being offered at least 10 more years of life. Who knows what will develop in that time?

"Most of our patients will be kept on dialysis for years before being offered kidney transplants, for they do not have related donors, and results with cadaver transplants, even in the best of hands, are not nearly so good. When it works well there is no doubt that the patient is better off than he would be on dialysis. But if it doesn't work well, very serious, irreversible problems may occur, even if the kidney is removed and the patient is taken off immunosuppressive drugs."

Right now, a number of scheduled transplant operations are being delayed at the University of Chicago hospitals because there is considerable uncertainty

The greater danger in home dialysis has always been the possibility of a severe accidental blood loss.

about how the provision of the new Federal law will be interpreted. The law says that a patient must be on a program for three months before the Social Security Department will take over payments. What is unclear is whether patients already on the program now will still have to go through a waiting period, "which only increases morbidity and mortality."

"The LifeMed dialysis delivery machine we use for home dialysis costs somewhere between $5,000 and $6,000. Most dialyzer cartridges cost about $15, and we think the Markley dialyzer will run the same when it goes into commercial production. Salts for the dialysate cost about $30. Simply for supplies, dialysis costs $135 a week. And when it is done in a hospital, you must add on the cost of staff and overhead.

"We don't know what is going to happen to these programs. Illinois was once the most advanced state in this area. Five years ago, before any other state, it enacted legislation to support patients on dialysis. Twenty-eight states have now patterned their programs after that legislation. Criteria for eligibility, however, excluded malignant hypertension, probably because a 30-year-old with chronic renal disease who has had hypertension for several years is at higher risk than another 30-year-old with chronic renal disease and no history of hypertension. Only in the last two years has the state begun to make exceptions.

"This is precisely what we are afraid of in the Federal bill. States had already cut back budgets in expectation of Federal money. But if mechanisms of the Federal law limit payments for dialysis, or set criteria that exclude malignant hypertension, it is going to be a catastrophe, particularly for patients in low socioeconomic groups.

"This kind of legislation can be fiscally prudent but medically imprudent. I don't see a patient as a factor in the GNP or the Federal budget. Yet I may have to face making life or death decisions based upon whether or not a patient qualifies for State or Federal support, or has third-party insurance.

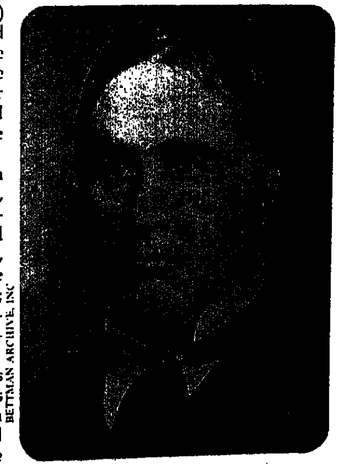
"All the hard work that has gone into getting people to recognize the problem, and getting legislation to cope with it, can be wiped out if government agencies do not take a realistic approach to the payment of expenses of care. Research in *transplant surgery of all kinds could slow down and we would lose the gains we've* made in recent years. I think it would take the country a long time to recover them, if it ever does." ⓘ

HYPERTENSION CLASSICS ...Sir William Gull: the arterioles

Sir William Withey Gull (1816-90) of Guy's, pathologist, clinician and sarcastic epigrammatist ("Make haste and use all medicines before they lose their effectiveness."), presented a paper with H. G. Hutton of London Hospital in 1872, in which they described three forms of chronic Bright's disease.

They found (1) kidneys often much contracted, heart much hypertrophied, minute arteries and capillaries throughout the body thickened by hyalin-fibroid formation; (2) kidneys little contracted, but heart much hypertrophied, minute arteries and capillaries much thickened; (3) kidneys healthy, heart much hypertrophied and minute arteries and capillaries much thickened.

They confirmed George Johnson's findings of alterations in the arterioles (1868), but did not accept that such pathologic change could be attributed to urinary excreta. Rather, it was to be attributed to a hyalin-fibroid formation in the walls of the minute arteries and a hyalin-granular change in the corresponding capillaries—occurring chiefly outside the muscular layer, but also in the tunica intima of some arterioles throughout the body. "This morbid change in the arterioles and capillaries is the primary and essential condition called chronic Bright's disease with contracted kidney."



BETTMAN ARCHIVE, INC

In a lecture given in the same year, Sir William said:

It is always dangerous to rest in a narrow pathology; and I believe that to be a narrow pathology which is satisfied with what you now see before me on this table. In this glass you see a much hypertrophied heart and a very contracted kidney. This specimen is classical. It was, I believe, put up under Dr. Bright's own direction, and with a view of showing that the wasting of the kidney is the cause of the thickening of the heart, I cannot but look upon it with veneration, but not with conviction. I think, with all deference to so great an authority, that the systemic capillaries, and, had it been possible, the entire man, should have been included in this vase, together with the heart and kidneys; then we should have had, I believe, a truer view of the causation of the cardiac hypertrophy and of the disease of the kidney. ⓘ

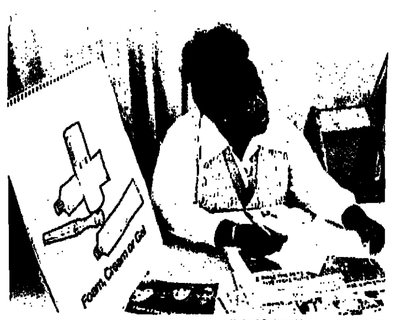
Medical Tribune Photos—Harry Hamm

Above at left, elderly persons enjoy their ride up the Hudson. The program run by the Hospital Ship gave the participants a day's outing and lunch as well as several types of screening, care, and advice. At right, one of the women has her blood pressure taken. Eye examinations, blood tests, and general physical examinations were among the tests also given. The Hospital Ship program reaches several thousand of the area's senior citizens each summer.

Many elderly have no access to a doctor and no idea where to go for care.

City Health Fairs Take Fun, Medical Help to the People

NEW YORK, LIKE MANY OTHER LARGE CITIES, is having an increasing number of health fairs during the summer. Some are run by city agencies, some by private medical institutions, but all aim to bring health care and information to areas of the city and groups of people that do not have easy access to health facilities. Along with the medical programs come entertainment and fun for the participants. Shown are three types of fairs held this summer in New York—a community block party and health fair held in connection with the Health Services Administration of the city, a trip up the Hudson and health programs for the elderly on the Hospital Ship, and a fair run by Brookdale Hospital Center.



Medical Tribune Photos—Luigi Pellettieri

At the Brookdale Fair, held in a striped tent, the emphasis was not only on examinations but also on education and advice. Many of the street health fairs, like the one at right, are held with the assistance of local block groups.

At the Brookdale Fair, refreshments, bands, a puppet show, and special attractions such as the trampoline helped in relaxing the children.

Street fairs provided measles and rubella immunizations and tests for lead poisoning, sickle cell anemia, and VD. Hypertension screening, drug referrals, and lectures on dental care were also given.

U.S. Physician Shares Expertise With U.S.S.R.

Medical Tribune World Service

MOSCOW—At 8 A.M. every working day Dr. James F. Holland and his wife leave their apartment on the edge of Prospect Mira, one of this city's main boulevards, in their Volkswagen minibus. Mrs. Holland drops one of their six children off at a city school and drives her husband to a main subway station. By 9 A.M. he is at work in his office at the Institute of Experimental and Clinical Oncology, the principal U.S.S.R. center for research in this field.

After that, Mrs. Holland, a psychiatrist and consultant to the National Institute of Mental Health, drives to Moscow's 4,000-bed Kaschenko Psychiatric Hospital. There she starts her day's work alongside Soviet investigators and clinicians at the research institute on the grounds of the hospital.

Between them, the Hollands are demonstrating the reality of the agreement signed in May last year between the United States and the Soviet Union for collaboration in a number of key areas of medicine and science.

Four main sectors are envisaged in the cancer program—virology, immunology, chemotherapy, and genetics. Dr. James Holland, a specialist in chemotherapy with an international reputation for his therapeutic techniques in acute lymphoblastic leukemia, is the first of the U.S. "super-consultants" who will operate the exchange. Officially attached to the National Cancer Institute, he has been in the Soviet Union with his family since November.

Before taking up the consultancy, he was chairman of medicine A and director of the cancer clinical research center at Roswell Park Memorial Institute, Buffalo, N.Y. When he returns to the United States later this year, he will take a post as Professor of Neoplastic Diseases and chairman of a new department in that field and director of the cancer center at Mount Sinai School of Medicine, New York.

Now, after several months in Moscow, Dr. Holland walks along the corridors and through the wards of the institute with the air of a man who is completely at home.

No tyro at languages, he carries on conversations in Russian with some of the staff and in German with others. He got his introduction to Russian with a crash course ("10 hours a day for 10 days") before leaving Bethesda, Md., and he and his wife take regular tutoring at home. The Soviet doctors are up on languages, too, and since many are fluent in English, communication is not a major problem.

Dr. James F. Holland (center) discusses chest films with colleagues during a visit to the wards at the Institute of Clinical and Experimental Oncology in Moscow.

Considerable efforts have been made by the Soviet authorities to make it possible for the Hollands to work and live as they want—in direct contact with the world around them.

"There were some suggestions that we should be given one of the apartments normally allocated to diplomats. But we didn't want to live in that kind of milieu, in which everything is laid on—gasoline, theater tickets, duty-free liquor and cigarettes, and so on—and the only other people you meet are diplomats and their families," Dr. Holland commented.

"Going shopping is a lengthy business," the physician said.

He and his wife have now adapted to the system , in which the customer first identifies what he wants to buy in the store, then obtains a ticket for it from the assistant. The ticket has to be brought by the customer to the cashier, who takes the money, stamps the ticket, and gives a receipt. With this receipt the customer then returns to the assistant to pick up he goods.

Fortunately, the Soviet authorities were able to provide the Hollands with a daily helper who copes with the shopping and other chores, thus freeing Mrs. Holland for her work at the psychiatric institute.

Because of their desire to expose their children fully to the cultural experience of life in Moscow, they did not want to send them to the schools run for the diplomats' families. They learned from a friend that some schools in Moscow put special emphasis on English-language studies.

The principal of the school they approached agreed immediately to take their five school-age children.

"We found the teachers warm, human, and flexible," Dr. Holland says. "For my youngest child, who had the most difficult adjustment to make, the school authorities moved a Russian child who spoke English well from another classroom to sit beside him and *help him* along."

The Russians show their appreciation in other ways. Dr. Holland can count on getting tickets for the international ice hockey games for his sons—a sure sign of favor. His daughter wanted to take music lessons—and was granted a place at Moscow's Tchaikovsky Conservatory.

There are times when the hospitality becomes a little overwhelming. As part of his program of work in the Soviet Union, Dr. Holland has a schedule of visits to medical centers in a number of areas, including Alma-Ata in Kazakhstan, Sukhumi and Tbilisi in Georgia, Jereva in Armenia, and Riga in Latvia, as well as Leningrad and Kiev. On such occasions, Dr. Holland is usually invited for what is cheerfully referred to as "a little tea." In fact, he often finds himself in front of a table groaning with caviar, sausages, cakes, fruit, and vodka, to all of which full justice must be paid.

The Holland family sits down to lunch in their apartment. The apartment was provided for them by the Moscow City Council and is in the center of the city. It was redecorated by painters and plasterers who were sent over from the hospital.

One Man... and Medicine

ARTHUR M. SACKLER, M.D.,
International Publisher, Medical Tribune

An Endangered Species—Homo Sapiens

IN OUR ECOLOGIC ERA, millions enroll to "protect the environment." "Clubs" organize to prevent the rape of the land. Legal actions seek to protect forests, birds, and beasts. Strip mining is condemned. Pipelines are "enjoined." A steady beat of "education" or propaganda focuses on "doomsday," 1984, or the year 2000. In response to clear and present dangers we act to protect flora, fauna, and the biosphere. Some of my best friends lead such movements. Let it be clear that we firmly endorse their goals and their efforts. They are well meant, well financed, and well organized—all to the good. But why do our Government, our society, and most of our crusaders turn their backs on one endangered species—man? Is that present reality too painful?

The Truly Baffling Questions

Granted, man cannot live alone on this planet. Assuredly, he is its worst polluter. Agreed that man belies his title of Homo sapiens both in his rapacious behavior and unhappily, in his efforts at "conservation." What baffles us are the priorities being set. Is a bald eagle more precious than a black baby? Are a thousand trees more important than a thousand lives? In a London newspaper one single item reports the savage mutilation of tall Tutsi tribesmen as their feet are chopped off to shorten them to the height of their Hutu foes. Hundreds of American newspapers and magazine stories and TV shows stress the catastrophe of chopped down trees and of forest fires. Yet, when thousands die and priests bear testimony to massacres, no one does anything. As in an earlier day, when millions of men, women, and children marched into gas chambers, were stuffed into "ovens," or shot and shoveled into mass graves, the cry for help, for pity, finds neither echo nor answer. Why?

Who Acts?

I'm all for the happiness of the whooping crane and the Bengal tiger—may they prosper and multiply. But much as I'm moved by their plight, I cannot forget the hunger and the sickness, the misery and disease of tens of millions of women and children, and men, too. Have a drug—thalidomide—cripple 5,000 to 10,000 children and the governments of the world mobilize to meet the tragedy. Have hundreds of thousands, even a million, children maimed, mentally and physically, by neglect and medical ignorance by what a passionate doctor has called "thalidomide II" and who listens? You can save babies and brains with the simplest of measures—adequate maternal protein intake and preservation of mineral and vitamin balance—but who acts?

I'm for the bald eagle, for the whooping crane, and the Bengal tiger—but first and foremost, I'm for mother and baby and man.

Contradictions in Priorities

One is completely baffled by the distorted priorities even in the United States. Staff members of the National Institutes of Health make recommendations in regard to the management of the aborted fetus. An unpublished Government report indicates that staff scientists are involved "in proposing new ethical guidelines for research involving pregnant women, children, and the human fetus," and the suggestion is made that "research on very early birth should be done first on animals and only on humans when other possibilities have been exhausted." Yet the very same bodies fund research in which restricted diets are continued in pregnant women used as controls in the face of an extensive bibliography of the effects of nutritional deficiency in pregnant animals.

Roger Williams, the first man to identify, isolate, and synthesize pantothenic acid, the pioneer who named folic acid, a man responsible for some of the major original work in the field of vitamin research, and a member of the National Academy of Sciences, opened his chapter on "Stillborn, Deformed and Mentally Retarded Babies" with the statement: "If all prospective human mothers could be fed as expertly as prospective animal mothers in the laboratory, most sterility, spontaneous abortions, stillbirths, and premature births would disappear; the birth of deformed and mentally retarded babies would be largely a thing of the past.

"It has been amply demonstrated throughout the entire animal kingdom that during the period of pregnancy nutrition must be at a particularly high level."

Superior Nutrition for Whom?

He goes on to say, "The nutrition available to millions of humans is no better, relatively speaking, than that which was furnished laboratory rats many decades ago—long before modern nutritional knowledge began to accumulate. . . . The truth is that the nutrition available to household pets and farm animals would very often rate good to excellent. . . . What excuse can there be to justify the fact that nutrition for animals is far superior to that for humans?" He stated, "It is unthinkable that anyone would experiment by giving pregnant women deficient diets in order to see how badly their babies might develop; but experiments of this sort have been done with animals and the results are clear-cut."

In a profession in which prevention is recognized as the best medicine, we confront the incredible approach to prematurity and defective babies—a thrust for more intensive care units: expensive and time consuming, too little and too late. How can one turn his back on basic knowledge which can prevent damage and focus on measures which will "save babies damaged in utero for a life of mental retardation, spasticity, misery for themselves and for their parents"?

Population Nonsense

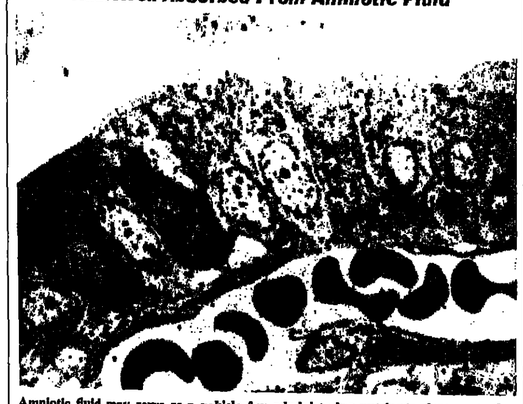
I almost forgot—we do have societies and crusades for "man": the Z.P.G. movement, the doomsayers of the population explosion, the exploiters of the "population bomb." Having spent several years gathering data on this subject, I've developed a sensitivity and found myself reacting almost anaphylactically to what I call "demographic nonsense" and what the world-famous scientist and historian of science J. D. Bernal called "reactionary nonsense."

Do I think it would be to the good if population growth slowed? Of course I do. But I cannot help myself; I first want to see those now on earth cared for now, their health protected, their diseases treated, before I worry about the hypothetical and possibly mythical extra billions crowded together shoulder to shoulder after the year 2000.

What Does Man Need?

If you want to get an idea of distorted perspectives, read the repeated reports of recommendations by some scientists that we must prepare to license people as to how many children they may have. Do babies pollute the environment more than beer cans? Does man, biologic man, consume and destroy more than motors? Do we really all need two-car, even three-car, families, two TV sets, or three or more radios? Has anyone even studied how much these artifacts of our lives contribute to pollution? Man's feces make a good fertilizer, and man, organically, is essential to our ecosystem. His cans and cars are not. Sure, they contribute to convenience and some are even essential for transportation, communication, and work. But does each man need one or more six-passenger cars to transport one to two people? We license cars—let's license them by horsepower and number per family. Why not? Is that beyond the realm of the possible? Or do "we hold this truth to be self-evident," that GM and Ford have a greater right to produce cars than you and I to procreate?

Radioiron Absorbed From Amniotic Fluid



Amniotic fluid may serve as a vehicle for administering nutrients, drugs, or other compounds. In fetal absorption studies on rats at New York Medical College, radioactive iron from swallowed amniotic fluid was detected in the intestine, liver, and spleen. This radioautograph shows absorption by the mucosal epithelium of the fetal intestine. Silver grains (black dots) over the cytoplasm indicate passage of radioiron through the cell to underlying connective tissue and blood vessels.

EPIGRAMS: Clinical Notes

You do not have to be a poet, but you are obliged to be a citizen.
Nikolai Nekrasov (1821-77)

Phenomenal Growth Reported In Medical Ethics Teaching

Medical Tribune Report

WASHINGTON—Ethics teaching is rapidly moving out of the closet and into the medical school curriculum, a specialist in the field told the American Medical Association's fourth National Congress on Medical Ethics here.

In fact, "the growth of [ethics] teaching programs has truly been phenomenal," said Robert M. Veatch, Ph.D., associate for medical ethics at the Institute of Society, Ethics, and the Life Sciences at Hastings-on-Hudson, N.Y.

He reported that an institute study of ethics teaching at 95 of the nation's 102 medical schools disclosed that 14 offered no instruction in medical ethics, and 37 others said the subject occasionally came up for discussion in various courses but was not taught in any systematic way. In 44 schools, the presentation of ethics has become fairly systematized.

"If we are about at the point when the honeymoon is over," Dr. Veatch declared, "we can truly look forward to a time when the systematic and integrated, well-developed medical ethics teaching program is fully incorporated into the family of medical disciplines."

In those schools where ethics teaching is still on an improvisatory basis, he said, classroom discussions were described as arising most often in courses on community medicine, social medicine, introduction to the patient, legal medicine, psychiatry, and public health, as well as in case discussion during students' clinical training.

"It appears that the difference between the 37 schools where medical ethics was taught only in *ad hoc* situations in other courses and the 14 schools which claimed they had no medical ethics instruction is in the eyes of the person reporting to us," Dr. Veatch remarked.

The 44 medical schools where more systematic training in ethics is offered vary widely in their approach to the subject, he said. At least 37 now offer some kind of elective ethics course; examples are "Ethical Considerations in the Practice of Medicine" at the University of Oregon, "Human Values in Medicine" at the University of Nebraska, and "Ethics and Medicine" at Pennsylvania State University. Other schools give instruction focused on specific ethical issues, such as two that offer elective courses on death and dying, two others that have courses on ethics and human sexuality, and Columbia University, which has offered a course on the ethical aspects of the medical control of human behavior.

Two Schools Require Courses

At two schools with religious affiliations, ethics is a required course, and Ohio State University's Pilot Medical School has experimented with a set of 14 two-hour sessions on medical ethics for an entire class.

Other ways in which medical schools have, at one time or another, taught ethics are through special lectures and conferences; lectures on specialized topics in department courses, such as discussion of abortion and population control in obstetrics classes; interdisciplinary conferences or symposiums; and clinical case conferences, according to the study.

"Another of the more innovative methods of teaching medical ethics is patterned after the senior-year clinical clerkships which in many medical schools are offered to medical students on the basis of a one-month, full-time intensive clerkship," Dr. Veatch said.

"Our institute has now taken interns from a number of different medical schools for a month or more of intensive study. Topics have included the care of the dying, the ethics of allocating scarce medical resources, and the history of medical ethics."

Clinical Trials

by Oldden

Higher Mortality Seen in Teen Pregnancies

Medical Tribune Report

ANN ARBOR, MICH.—The death rate for teen-age mothers and their babies is 30 per cent higher than that for mothers age 20 to 24 years and their babies, a Detroit physician reported here, asserting that the situation "is not just fetal and maternal wastage."

"There are large social consequences in teen-age pregnancy—curtailed education, the mire of economic disadvantage, the emotional conflict, and perhaps suicide," Dr. Joan Stryker, of Hutzel Hospital, told a seminar on human sexuality at the University of Michigan.

Dr. Stryker, who is also medical director of the Planned Parenthood League of Detroit, said that there is a great need to provide teen-agers with more intensive, accurate, and honest information on all aspects of sex.

She described the early results of two birth control centers for teen-agers that she helped to establish. One is a clinic for pregnant girls 17 years old and younger, operated at the hospital, and the other a Planned Parenthood teen center for both boys and girls.

Detailing "subtle" changes in the two years that the clinics have been operating, she said that, first, there are fewer irate parents calling, "in fact, the parents are becoming involved even to assistance in the form of money and time." Another change, she reported, has been in education—the patients request more sex information and the word has gone out that "the clinics offer worthwhile information and comprehensive health services."

A survey of the pregnant girls in the clinics, conducted this spring, found that 81 per cent had never used a contraceptive; in a survey conducted last fall the figure was 95 per cent.

64% Requested Abortions

Both surveys showed that about 64 per cent of the girls requested abortions. Of the 36 per cent who chose to deliver their babies, the spring survey disclosed that about half said they intended to raise their babies and remain single, 15 per cent said they intended to marry, and 3 per cent said they would place the infants for adoption. In the fall survey, the respective figures were 5 per cent, 21 per cent, and 9 per cent.

Describing her approach to sex counseling and the provision of contraceptives, Dr. Stryker said, "If the teen-ager has never been sexually active but comes for contraceptive advice, I personally talk to her for two reasons—the legal, so that we cannot be accused of contributing to the delinquency of a minor, and to be sure the patient really wants to have sexual intercourse. Subconsciously, they may want a brake. Some girls are relieved when I say No." She noted that "the door is left open a crack" and the patient is assured that when she is ready to have intercourse she could come back.

With respect to the contraceptives prescribed, Dr. Stryker said that for the girl who has never been pregnant and who has intercourse less than once a month, it is suggested that she use vaginal jelly and her partner a condom. For the more sexually active girls, birth control pills are prescribed for those in good hormonal balance, but a diaphragm, intrauterine device, or combination of jelly and condom for those with irregular menstrual cycles.

Dr. Stryker recommended the pill for girls who have been pregnant, but she added that an intrauterine device may be a better choice of contraceptive for young women who are likely to forget to take the pill regularly.

Tokyo MDs Agree to Plan For Holiday Emergencies

Medical Tribune World Service

TOKYO—Physicians at 200 hospitals and clinics in Tokyo will treat emergency cases on Sundays and national holidays under an agreement between the city Government and the Metropolitan Medical Association. This is the first agreement of its kind in Japan.

Three hundred beds and 100 medical institutions also will be available for cases requiring immediate hospitalization. The city has set aside more than $1,000,000 in its fiscal 1973 budget for the program.

Gastroenterology

Proper Training, Temperament Urged in Use of Colonoscope

Medical Tribune Report

NEW YORK—A warning that anyone planning to use the new fiberoptic colonoscopes should have adequate training as well as the right kind of temperament was sounded during a panel discussion of colonoscopy here at the annual convention of the American Medical Association.

Use of these highly sophisticated instruments is now increasing rapidly, yet almost no courses are available to provide instruction in techniques, the panel members told a session held jointly by the Section on Colon and Rectal Surgery and the Section on Gastroenterology.

"Fiberoptic colonoscopy constitutes a real advance in the diagnostic and therapeutic armamentarium of the medical profession," said Dr. William I. Wolff, of New York's Beth Israel Medical Center, where he and colleagues have performed more than 4,000 diagnostic colonoscopic examinations and some 600 polypectomies.

"All of us are very much concerned that the procedure doesn't develop an undeserved disrepute because it is not carried out properly," he added.

Dr. Wolff urged the development of training programs so that physicians can gain expertise and experience under supervision.

Several specialty groups, including gastroenterologists, surgeons, proctologists, and radiologists, are showing keen interest in performing the procedure, he pointed out. But he emphasized that "it isn't really important who does the procedure so long as the person doing it is competent."

The colonoscope amounts to a probe, he said, quoting the old surgical maxim that "there are few more dangerous instruments than a probe with no brains behind it."

By Dr. Wolff's definition, competence includes the following:

- Manual dexterity, termed essential.
- An interest in what is being done.
- Knowledge of gastrointestinal diseases, since what is seen "must be correctly interpreted and put into context with the patient's clinical symptomatology."
- Suitable temperament. It takes time "to develop the skill required to pass the instruments and to do this safely—if the physician is going to hurry, he's bound to get into trouble."
- Judgment. "The endoscopist must recognize his limitations, the limitations of the case, and when to proceed and when not to go ahead."

A fellow panelist and surgeon, Dr. Howard Jay Eddy, Jr., of Garden City, Long Island, also advocated setting up workshops or courses to provide training.

"With the legal implications of performing colon surgery without a prior colonoscopy looming on the horizon, the necessity for the establishment of training programs is of the greatest importance," he said.

Meanwhile, Dr. Eddy thinks some form of limitation should be imposed on the "would-be 'instant endoscopist.'"

Discussing reported instances in which physicians have bypassed offers of training because they preferred to "try out procedures for themselves," he said he had only one comment:

"God help the patient *and* the procedurel"

Duodenal Ills May Be Causing Upper GI Bleeding

Medical Tribune Report

NEW YORK—Hemorrhagic duodenitis, an entity distinct from peptic ulcer disease or other known inflammatory diseases of the esophagus or stomach, should be considered in the differential diagnosis of upper gastrointestinal bleeding, a Michigan gastroenterologist emphasized here.

Of 35 patients with nonspecific duodenitis, eight were observed with hemorrhagic duodenitis significant enough to cause acute upper gastrointestinal bleeding as evidenced by hematemesis and/or melena and blood-loss-type anemia, Dr. Eugene A. Gelzayd of Southfield, Mich., told a meeting of the American Society for Gastrointestinal Endoscopy, held in conjunction with the annual meeting of the American Gastroenterological Association.

Clinically, he reported, anemia was present in seven of the eight patients, and four required multiple transfusions. Hematemesis was present in four cases and melena in all eight. Dyspeptic epigastric distress in five patients preceded the onset of the bleeding by a variable period of time. Two patients were asymptomatic and a third had onset of massive bleeding during a myocardial infarction.

Radiologic findings included spasm and irritability of the bulb and coarse folds in the proximal duodenum in six of seven patients studied, said Dr. Gelzayd. Maximum histalog gastric analyses, quantitative serum immunoglobulins, and direct examination of duodenal secretions for Giardia and other parasites were normal in five patients.

Duodenoscopy Was Abnormal

Duodenoscopy was abnormal in all eight patients and included hyperemia, mucosal friability, and superficial erosions with active bleeding. In three patients there was also mild mucosal nodularity of the bulb and proximal duodenum. Endoscopically, the stomach was normal in all patients. Mild erosive esophagitis without visible bleeding was seen in one acute alcoholic patient; two others with alcoholic liver disease had intact esophageal varices.

Histologic evidence of duodenitis was found in six patients who underwent target mucosal biopsies of the bulb and proximal duodenum, Dr. Gelzayd said. This included superficial ulcerations of the epithelial lining, mild degrees of villous flattening, crypt dilatation, and dense acute and chronic inflammatory cell infiltration of the lamina propria, which, in two patients, extended into the Brunner's gland area. Edema, dilated and engorged capillaries, and intramural hemorrhage were also noted.

A history of significant alcohol intake was recorded in four patients, and aspirin usage before bleeding, averaging four to six tablets a day for several days, in two patients.

Conservative treatment, consisting of nasogastric intubation and suction, antacids and milk, diazepam, and reassurance, said Dr. Gelzayd, resulted in cessation of bleeding in seven patients for up to two years' follow-up. The patient with the myocardial infarction died.

"Correction of anemia with blood transfusion or iron is also important," he said.

He added that, "conceivably, surgery may be advisable in some cases for uncontrollable hemorrhage."

He recommended endoscopic follow-up in patients with hemorrhagic duodenitis. Follow-up duodenoscopy and biopsy were performed in five of the patients, nine to 18 months after the initial bleeding episode. Three demonstrated mild patchy hyperemia and friability, one mild nodularity of the bulb mucosa, and the fifth a normal-appearing duodenum. Actively bleeding erosions were not seen, but in all five patients histologic inflammatory changes of duodenitis were still present.

Coauthor of the report was Dr. David Gelfand.

IN CONSULTATION

Continued from page 4

proximately two thirds of the intrapartum mortality will occur in this group. Thus, one third of infant deaths may escape prevention.

Modern electronic monitoring includes both the invasive and the noninvasive techniques. The noninvasive technique uses an external tocodynamometer and a doppler recording instrument that provides a reasonably accurate assessment of the frequency of uterine contraction and the relation of the observed uterine contraction to changes in fetal heart rate. It is not an accurate assessment of the intensity of the uterine contraction. The invasive technique places, alongside the infant, a hollow catheter which is attached to a strain gauge, the catheter is filled with normal saline, and one then accurately records, in millimeters of mercury, the intensity of the uterine contractions. A scalp electrode or skin electrode is placed on the presenting part and records electronically the fetal heart rate.

The use of the internal method when oxytocin augmentation is required is particularly helpful. One may avoid increasing resting tonus and similarly inadequate oxytocin administration. Effective uterine contractions occur when the intrauterine pressure is above 50 mm. of mercury.

After total hysterectomy is there any need for annual Papanicolaou smears?

If the hysterectomy was done for benign indications, then the cost of routine pap smears outweighs the potential diagnostic yield when compared with the observed incidence of carcinoma of the vagina. The psychologic advantage of the patient returning for annual pap smears and pelvic examination as well as breast exam, however, makes the inclusion of this technique good medical practice.

If the patient has had in situ carcinoma of the uterine cervix or dysplasia, and, of course, if there has been pelvic malignancy, then routine six-month to annual pap smears are essential. The patients will come in following hysterectomy for their annual pap smear, but often are reluctant to come in for pelvic examination and breast exam if you tell them that the pap smear is no longer a requirement.

How do current American perinatal mortality studies compare with those of other countries?

We are frequently assailed by the statement that American medicine is inferior medicine because our infant mortality rate ranks us 11th or even worse in the world.

The infant mortality rate (infant deaths per 1,000 live births during the first year of life) is not a good statistical comparison for the following reasons: (1) definition of a live birth in the past has varied from country to country. In most states, any sign of life is recorded as a live birth, regardless of infant weight or duration of gestation. (2) It is very difficult to compensate for underreporting of infant births and early infant deaths where a significant percentage of the births occur in the home. (3) A leading factor in infant mortality is prematurity. We know that prematurity is a socioeconomic phenomenon related to race and general economic status. Thus, Swedes in Sweden and Minnesota have the same low prematurity rate.

We are then comparing mortality rates and studies with varying criteria between countries of relatively stable genetic makeup and a country of tremendous genetic mix and socioeconomic differences.

Yet it is apparent that a significant reduction in perinatal mortality remains to be achieved in this country. This reduction can certainly be accomplished by providing to each infant the optimum care during its terminal perinatal period. Availability of newborn expertise to each birth would certainly advance our relative position even with the above discrepancies.

Mosquito Control Crisis

WASHINGTON—"Mosquito control today is in a state of crisis," concludes a new report from the National Academy of Sciences' Board on Science and Technology for International Development.

Noting that in the past 30 years mankind has been almost completely dependent on synthetic organic insecticides, the report says that owing to serious environmental problems, "effective chemical weapons are vanishing and suitable replacement chemicals are scarce."

Yet, it points out, mosquito control continues to be desperately needed, especially in tropical areas where mosquito-transmitted diseases, such as malaria, yellow fever, filariasis, and dengue, are serious problems.

Biologic methods are recommended as an alternative to the fast-fading chemical controls. These "well-publicized but undersupported" approaches to disease control are the most promising of any methods now available, it says, predicting that "significant breakthroughs in biological control can be expected within five years—given adequate support and sustained research."

Cholera Vaccine Fails

GENEVA, SWITZERLAND—Cholera vaccination has been a failure, and in the future it should not be required as a condition of admission of any international traveler to a country, the World Health Assembly declared here.

The decision followed a report noting the failure of vaccination in preventing the international spread of cholera. The vaccine, while offering partial protection, does not prevent people from becoming carriers with practically no symptoms and is therefore not effective as a defense against the importation of the vibrio, according to WHO.

Renal Theory Challenged

INDIANAPOLIS—The theory that the glomerular filtration rate is drastically decreased in acute kidney failure was challenged by Indiana University School of Medicine investigators. They reported on inulin-C^{14} studies indicating that the renal function disturbances are primarily from tubule leakiness and tubule obstruction.

In the rat kidney, after temporary renal artery occlusion, it was found that the filtration in surface glomeruli occurred at a near-normal rate, they said.

The investigators were George A. Tanner, Ph.D., and Samaisukh Sophasan, predoctoral fellow.

Plants Used in Drugs

TASHKENT, U.S.S.R.—More than 100 medicinal preparations, most of them derived from local plants, are manufactured by the state pharmaceutical enterprises here. Several scientific institutions, grouped under Uzbekistan's Institute of Chemistry of Vegetable Matter, study the flora of the region for pharmaceutical purposes and select those to be produced industrially.

The preparations are used in a wide range of diseases, including hypertension and cardiac insufficiency, neuroses, and inflammations. They are, in addition to domestic use, exported to 20 countries, including Poland, Mongolia, India, and Australia.

Obese Africans Treated

OSLO—Good results in the treatment of obese Africans with fenfluramine were reported at the ninth Acta Endocrinologica Congress here by Dr. Eric N. Mngola, of the Kenyatta National Hospital, Nairobi, Kenya.

In a 24-week, crossover trial on 20 patients, mean weight loss of patients on fenfluramine was 4.9 Kg. as against 0.3 Kg. for those on placebo.

Dr. Mngola said there were minimal side effects and relatively few patients reported significant hunger during the trial.

Cockroach Is Linked to Allergic Illnesses

Medical Tribune Report

NEW YORK—In cockroach-infested homes, sensitivity to the insect may be a factor in causing allergic illnesses, and the inhalation of house dust may be one of the routes by which the sensitivity is produced, according to Washington investigators.

They detailed a study of 95 children of low socioeconomic status seen at the pediatric clinic of Freedmen's Hospital and District of Columbia General Hospital. Seventy of the children had allergic illnesses—42 had bronchial asthma, 22 allergic rhinitis, and six atopic dermatitis. The 25 control subjects had no history of allergic diseases.

All the children were skin-tested with cockroach extract, and the 70 allergic patients were also skin-tested with concentrated house dust.

Dust Might Include Particles

"In homes where there is a high prevalence of cockroaches, it is logical to assume that dust might include breakdown products of cockroaches as well," Dr. Nick Chehreh, who presented the report, told the Section on Allergy at the annual convention of the American Medical Association.

Of the 70 allergic patients, 30 per cent had positive reactions to the cockroach extract, whereas only 4 per cent of the nonallergic children reacted positively. There were positive reactions in 29 per cent of the bronchial asthmatics, 27 per cent of the allergic rhinitis patients, and 50 per cent of those with atopic dermatitis. The high percentage in the last category, said Dr. Chehreh, may have been due to the small number of patients tested.

When tested with concentrated house dust, 42 per cent of the allergic patients gave positive reactions, as did 41 per cent of the bronchial asthmatics, 55 per cent of those with allergic rhinitis, and 33 per cent of the patients with atopic dermatitis.

Among those giving positive reactions to house dust, 49 per cent were also positive to cockroach extract. Of those positive to house dust, 53 per cent of the bronchial asthmatics, 33 per cent of the allergic rhinitis patients, and 50 per cent of those with atopic dermatitis also gave positive reactions to cockroach extract.

Inhalation May Be One Route

"Although this finding is not conclusive for inhalation allergens," Dr. Chehreh commented, "it does suggest, however, that inhalation may be one of the routes by which cockroach allergens enter the body."

Coauthors were Carvason E. Griffith and Dr. Roland B. Scott.

1 of 3 Pakistani Children Shows Signs of Goiter

Medical Tribune World Service

KARACHI, PAKISTAN—One child in three among 2,000 of schoolgoing age examined here showed signs of goiter, according to a survey conducted by Jinnah Postgraduate Medical Center. The majority of cases were not receiving treatment, it was disclosed.

There are indications that the incidence in children is still higher in the upcountry, particularly in Multan, Chitral, Hazara, and Gilgit. A majority of villagers are affected by the disease, according to reports. The disease is caused by iodine deficiency.

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Physicians Are Blamed for 'People Pollution'

Medical Tribune World Service

AUCKLAND, NEW ZEALAND—A scientist and a former cabinet minister in the New Zealand Government have blamed doctors for "people pollution."

Speaking to the Medical Association of New Zealand, former Minister for the Environment Duncan MacIntyre told the doctors: "Whether you like it or not, one of the problems of environmental control which will be dumped in your lap is that of euthanasia. It is your duty to advise us in how to control the number of people."

Mr. MacIntyre said the world population explosion, which young people are calling the "ultimate pollution," presents many problems for the medical profession.

He asserted that physicians are responsible for much of it, with the millions of lives saved by drugs and the extension of men's lives by money and skill.

The scientist, Ian L. Baumgart, who is assistant director-general of the Department of Scientific and Industrial Research in New Zealand, told the conference: "The real cause of the problems we are facing is not, fundamentally, advancing technology or rising standards of living or willful destruction of natural resources.

"The fundamental cause is people, more and more of them brought into the world by the medical profession, kept alive to breed by the medical profession, kept alive to age . . . and to make a bigger impact on all stages of life by the medical profession."

Mr. Baumgart said scientists were sick of being blamed for creating problems that were caused primarily by the ever-increasing world population, "for which you medical people are primarily responsible."

Serum Calcitonin Determination Used To Detect Carcinoma of the Thyroid

Medical Tribune World Service

OSLO—Serum calcitonin determination is the method of choice for screening, diagnosing, and follow-up in medullary carcinoma of the thyroid, a Swedish investigator maintains.

Dr. Margareta Telenius, of the University of Lund, told the ninth Acta Endocrinologica Congress here that the calcium infusion test may give additional support to the diagnosis and surgery in borderline cases.

Despite the malignant character of these carcinoma cells, she said, they still retain the capability of calcitonin secretion as a response to hypercalcemia.

She reported on studies of 46 members of three separate families with Sipple's syndrome. As controls, she used healthy children and adults without evidence of disordered thyroid or calcium metabolism. Serum calcitonin was determined by specific radioimmunoassay.

Eight of the 46 patients were found to have basal calcitonin levels ranging from 1.6-27.3 nanograms/ml. (normal: <2 nanograms/ml.), and there was a rough correlation between calcitonin levels and tumor mass. Four of the eight had their carcinoma diagnoses verified by surgery and histopathology, and two by positive cytology from aspiration biopsy.

Device to Aid Newborns

Continuous positive airway pressure is being administered through a device developed at University Hospitals of Cleveland. The CPAP technique keeps the infant's air sacs open despite a lack of surfactant, respiratory defect seen in about 10 per cent of prematures.

HL-A Antigens Are Matched, Platelets Rise

RESEARCH

Medical Tribune World Service

PARIS—HL-A antigens are the most important platelet antigens for transfusion purposes, and HL-A-matched platelet transfusions from unrelated donors can effectively support patients who have become refractory to random platelet transfusions, Dr. Hans Peter Lohrmann told the annual meeting here of the European Organization on Research on Treatment of Cancer.

ABO incompatibility appeared to have no effect on the posttransfusion platelet increment, said Dr. Lohrmann, currently at the National Cancer Institute, Bethesda, Md.

He reported that 15 thrombocytopenic patients who had become alloimmunized to random platelet transfusions had been supported, some for over a year, with HL-A-matched platelets. None of the patients, whose thrombocytopenia was associated with aplastic anemia, leukemia, or chemotherapy for various malignancies, had died of hemorrhage.

No Refractoriness Reported

"Nine patients are alive at present and continue to be supported with platelets from the HL-A-compatible unrelated donors," he said. "No refractoriness to these donors' platelets has developed."

Platelet transfusions were given according to clinical indications, and an attempt was made to transfuse each patient from as many different HL-A-compatible donors as possible. ABO incompatibility was disregarded.

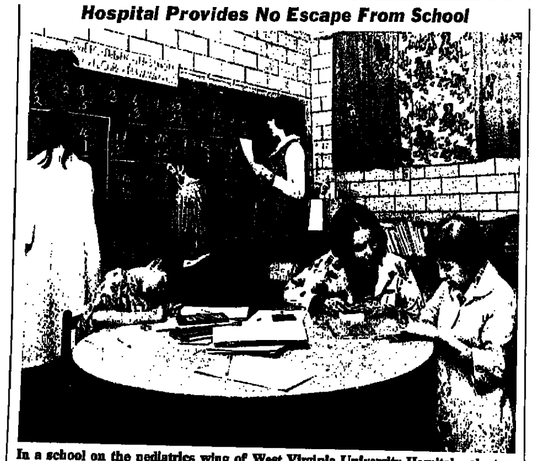
The results showed distinct differences in the posttransfusion platelet increment that correlated to the closeness of the HL-A match. HL-A-identical matches produced posttransfusion platelet increments that were normal; compatible matches gave intermediate increments and, by definition, mismatches gave essentially no platelet increments in these alloimmunized patients.

Dr. Lohrmann noted that there has been controversy in the literature as to whether or not the red blood cell antigens A and B are present on platelets.

"Our observations lend support to the concept that A or B substance is not present," he said.

The question of specific platelet antigens was brought up in the question-and-answer session following Dr. Lohrmann's report. Dr. Lohrmann responded that while such antigens are known to exist, they are the same in 95 per cent of the population and do not play a major role in platelet transfusions.

Hospital Provides No Escape From School



In a school on the pediatrics wing of West Virginia University Hospital, volunteer tutor Ann Morgan assists patients studying arithmetic. An elementary school teacher for four years, Mary Ellen Smith (at board) conducts classes for patients ranging in age from prekindergarten to junior high.

British Psychiatrist Urges Lithium Use for Depression

Medical Tribune World Service

ST. MORITZ, SWITZERLAND—*The treatment of depression has been transformed by the introduction of a range of successful drugs, speakers at an international symposium agreed here. In an interview with* MEDICAL TRIBUNE *a British psychiatrist—Dr. Alec Coppen, of the Medical Research Council—made a plea for an even wider approach to depression, based on prophylaxis with lithium. Work on these lines in the United Kingdom has demonstrated that it can bring about a marked fall in morbidity, Dr. Coppen declared.*

MEDICAL TRIBUNE: Dr. Coppen, society is becoming increasingly aware that depression is a health problem on a scale comparable to diabetes or leukemia. How far have we advanced in therapy?

Dr. Coppen: The advent of the tricyclic antidepressants has meant that we can now treat depression successfully. However, my view is that we should be working much further back along the line and seeking to prevent depressive episodes.

M.T.: You refer to lithium therapy?

Dr. Coppen: Yes. If prophylactic methods based on lithium are applied properly, we could hope to reduce the morbidity of this illness by about 80 per cent.

M.T.: You speak of prophylaxis. Is this not also really therapy?

Dr. Coppen: The answer to that is linked with the natural history of depression, considered as a disease. There is first a period which, if untreated, lasts several months. An interval occurs, and then along comes a second episode, again lasting several months. We know from epidemiological studies by Angst and others that the free interval tends to shorten with each attack. Thus, there might be a five-year interval between the first episode and the second, but between the second and the third the gap may narrow to three years, and so on. By the time the patient has had three or four attacks, we face not only the morbidity itself but also the question of recurrence at intervals which are now of only a few months.

M.T.: So there are two problems?

Dr. Coppen: In a way, it is all one problem. We can get to the point where we have difficulty in deciding whether an episode is new or part of the previous event. I always try to emphasize that we are dealing with a long-standing recurrent condition, and we must look at treatment in this perspective.

M.T.: In terms of results, how do the conventional and preventive treatments compare?

Dr. Coppen: Let me give you an example. We have been following up patients who have had three or more attacks of depression and were being treated by conventional methods in different centers in the United Kingdom. We found that they were spending, on average, nearly 50 per cent of their time with an episode, which is a very unsatisfactory state of affairs. With a prophylactic or stabilizer such as lithium, we could expect to bring this down to about 9 per cent.

M.T.: The reduction you quote is based on your studies?

Dr. Coppen: Yes. We have a lithium clinic in our unit, and similar work is also being done at other units in the U.K. The patients are seen every six weeks, and their clinical state, including blood plasma levels of lithium, is monitored.

M.T.: Do you have many backsliders?

Dr. Coppen: Our answer to this is to get the patients interested in their blood plasma levels, to get them to see it all as a cooperative effort.

M.T.: What is the longest period any of your patients has been on lithium as a stabilizer?

Dr. Coppen: I have been treating one patient for five and a half years. All the data suggest that certain patients are and will be increasingly vulnerable to a recurrence of depression for the rest of their lives. Our studies have shown that when they are taken off lithium and put on placebo they will often relapse.

M.T.: So they have to be maintained on therapy rather like hypertensives or diabetics?

Dr. Coppen: That is the position. It is a long-term task, in which the patient himself must become engaged.

9 of 10 U.S. Paraplegics Held Badly Rehabilitated

Medical Tribune World Service

VANCOUVER, B.C.—"Nine of 10 paraplegic patients in the United States are not being rehabilitated vocationally according to standard indices of record," said Ellis Reida, executive director of Rehabilitation International, a federation of rehabilitation agencies in 55 countries.

Since the United States does not keep separate vocational rehabilitation data on patients with spinal cord injuries, he said, it is impossible to know exactly how many paraplegics there are. Recent estimates put the number at about 125,000 with between 5,000 and 10,000 new cases occurring each year, he said.

The Car Clinic

Stretching Your Gas Efficiency

By JOHN E. MCDERMOTT, M.D.

Gasoline shortage? Whether real or envisioned, the "shortage" has further increased gasoline prices. The facts behind the shortage rival Watergate and the opinions are as numerous, but one fact is "perfectly clear"—it costs more to drive your car.

Many tips have been offered on how to save gas. In one gasoline company ad it was recommended you overinflate tires. The company, of course, also sells tires!

At the core of gasoline consumption, however, is engine combustion efficiency —this is the single most significant factor. What can be done to improve this? With modern electronic testing equipment in the hands of an expert, it is possible an automobile can be made more efficient and economical.

Standard Tune-up	Special Tune-up	Follow-up
182.1 miles	214.2 miles	188.1 miles
14.2 gal.	15.3 gal.	13.5 gal.
12.8 mpg	14 mpg	13 mpg

10 per cent increase in mileage

Test car: Two-year-old, four-door sedan, automatic transmission, full power, plus air conditioning.

Test mileage: Professional travel to hospital, office, calls, and home.

Follow-up: A check on the car's ability to hold special tune and, to insure no driver factor, a random check made after two weeks.

Ten per cent increased efficiency with tune-up or, put another way, 10 per cent savings on gasoline bills. Impressive? Not if the car was "out of tune," but this car was in tune. It was to manufacturers' *standards* and was "in tune" when adjustments were made.

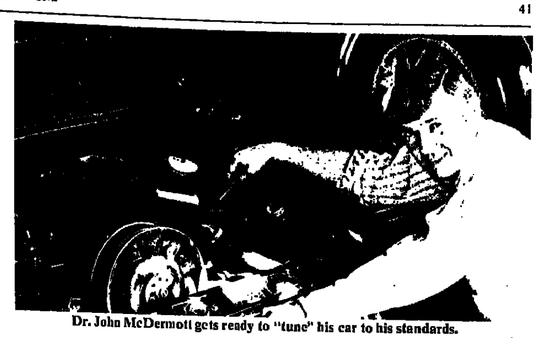
Illegal Adjustments?

What was done might be in violation of certain state emission standards, although no auto pollution devices were altered or removed. Quite simply, adjustment of air-gas mixture with spark advance for maximum efficiency was carried out. This may allow slightly more hydrocarbon loss, but it also allows the car to burn 10 per cent less gas.

Spark timing is expressed as advance. In reality, "the advance" is the degree to which spark plug firing is advanced, so that the spark occurs earlier in relation to the pistons' combustion in each cylinder. "Retard" is the reverse, with the spark firing later in relation to piston position. Both then express the relationship of spark firing to compression or piston position.

Like all newer cars, the test auto was built after the 1969 ignition conversion; a vacuum increase produces retardation of spark in contrast to the older system of vacuum advance. To achieve maximum efficiency, adjustment with electronic equipment was done to give maximum combustion. As stated, all other factors were up to the manufacturers' standards —spark plugs, valve adjustment, spark gap, etc.

By painstaking adjustment of the carburetor's mixture with adjustment of spark advance, it was possible to achieve maximum efficiency of combustion that can be read directly on electronic equipment.



Dr. John McDermott gets ready to "tune" his car to his standards.

Much more can often be done—and the result can be even more dynamic. On many automobiles the carburetor jets may be changed, particularly if the locality adds any atmospheric factors not planned for in manufacture. The use of cold spark plugs and even changes in gap can affect mileage—again this must be done in consideration of engine design and by an expert.

12,000 miles per year
66 gal. savings per year
$27.2 savings @ 42¢ per gal.

An improvement of 10 per cent is a minimum to be expected—as the test car had a highly tuned overhead cam aluminum engine. If the expert tuning was done on the typical Detroit large-displacement V-8, a savings up to 20 per cent could be expected. The problem, of course, is to find the expert who can do the job properly for you.

Occupational Dermatitis Appears to Be Increasing After Decline in 1950s

Medical Tribune World Service

VANCOUVER, B.C.—Industrial dermatitis, after a period of decline in the 1950s, is on the rise again, a symposium on Rehabilitation of the Industrially Disabled was told here.

The increase is taking place at a time when other industrial diseases and general illnesses are declining, said Dr. Desmond Burrows, consultant dermatologist for Royal Victoria Hospital, Belfast.

Occupational dermatitis ranges from 29 per cent of all industrial disease cases in West Germany to 78 per cent in Great Britain, he said.

"While the number of cases of industrial dermatitis is small compared with industrial injuries," Dr. Burrows observed, "a person will have five times more absences from work with occupational skin disease than a worker with injury."

He added that such ailments account for a decrease in working capacity of 7.3 per cent on the average.

Coal mining and textiles account for most dermatitis cases in West Germany, while the distributive trades and textiles account for most United Kingdom cases, Dr. Burrows said.

He stressed that knowledge of the patient's work is essential for any physician looking to treat what appears to be an industrial dermatitis. Chrome, nickel, and epoxy resins are examples of substances that are especially likely to sensitize, he said.

TRIBUNE SPORTS REPORT

Ballplayer Gets Out of Slump Thanks to Hypnosis Session

Continued from page 1

average has jumped from .258 to .321, making him one of the top hitters in the American League. "I went out to see the Orioles play last night," Dr. Conn told MEDICAL TRIBUNE in an exclusive interview. "You should see him hit that ball." Meanwhile the Baltimore *News American* sports editor is calling for Dr. Conn to get the "MVP" award—"most valuable psychiatrist."

A Hypnosis Fan

Are you a baseball fan? MEDICAL TRIBUNE asked Dr. Conn. "No, I'm not a fan of baseball. I'm a fan of hypnosis," said Dr. Conn. "Because this is a beautiful demonstration of what hypnosis is all about. Many physicians forget that hypnosis is one of the oldest forms of treatment known to man. Greek medical records show it was being practiced 500 years B.C. in the temple of Aesculapius. It was also practiced in the ancient healing temples of India."

Dr. Conn, a professor emeritus at Johns Hopkins School of Medicine who still lectures there on hypnosis, is one of the most expert practitioners of hypnosis in the nation. He told MEDICAL TRIBUNE, because of its physician readers, how Blair became his patient and explained why hypnosis became effective in Blair's case. Dr. Conn, a past president of the Society for Clinical and Experimental Hypnosis, was awarded a gold medal for his contributions to hypnosis in 1970.

How Case Arose

Blair was an exceptionally fine Oklahoma athlete, a former Golden Gloves champion, well coordinated and conditioned. However, three years ago he was struck by a "bean ball" thrown by Ken Tatum, of the California Angels. The hard-thrown ball struck him in the face and fractured his nose. After that, Blair became nervous at bat. If a ball came close to him, he ducked. He worried about whether he could duck in time. Pitchers began to pitch balls close to him, causing him to "bail out"—drop to the ground. His heart would pound and he would feel himself go slack.

Blair's batting average slumped. For two seasons he tried to pull himself together, but his nervousness—and his slump—continued. He was slowly being driven out of baseball by fear.

At this point a Baltimore *News-American* sports writer, Chan Keith, who had become a friend of Blair's, sought out that paper's medical writer, Joann Rogers. He asked who could treat fear. Months earlier she had written about Dr. Conn's work in hypnosis, and she now recommended him.

Keith suggested to Blair that he see Dr. Conn. At that point, June 15, Blair had scored only 38 hits and one home run, giving him an average of .258—and the season was one-third over. Blair, desperate, said, "I'll try anything."

Dr. Conn described the treatment for MEDICAL TRIBUNE because "hypnosis isn't well understood and in recent months research psychologists have been challenging it, calling it mere role playing—like giving an actor a role to play and coaching him in it. Actually, the Blair case is a beautiful example of how hypnosis works.

Role Playing Comes First

"Role playing is indeed the first stage. We all do this when we go to the theater and are drawn to some character and begin to feel and react with him through our identification.

"The second stage is regression. In this stage the patient moves back to childhood, to a secure and safe relationship in which he feels protected by a loving parent. And the third stage is a change in reality, a testing in which the fusing of reality and fantasy helps the patient meet the problem that has been defeating him."

In his office Dr. Conn had Blair relax and gradually recall his earliest days playing in the vacant fields of Oklahoma. "When we reached the regression stage, I told him, 'Now suppose there was a bunch of kids playing ball in the field. You go up up and ask if you can play too. Now remember you're a big-league player—and you have nothing to fear. Go take your turn at bat. See the pitcher warm up. Nobody can really hurt you. Your body will take care of you. It's in beautiful condition. Your instincts will move you out of the way of a fast ball.'"

Dr. Conn continued, "The third step was that of reality testing, meeting a change from normal—the process in which fantasy and reality become fused. In this phase I emphasized that his instincts will take care of him, protect him, move him out of the way, that he is a fine, experienced ballplayer and athlete.

"But now, instead of a kid pitching to him, we move up in fantasy to the father of one of these kids he's been playing with—a man who is a bush-league pitcher himself. And Blair feels safe and protected against danger—and he can hit. So we let him pitch—and Blair can remember going through the bush leagues and the fun he had there and hitting the ball out of the park.

"And all that gives him back his confidence, his way of feeling about himself. I tell him you don't have to be afraid. Just keep your eye on the ball. Your body will take care of you. You're ready for anything."

Blair had only one session with Dr. Conn. He returned immediately to play. At Dr. Conn's suggestion, he sat down before each game, looked at a spot on the ball, counted to 20, closed his eyes, and then recalled all the fun he had playing ball as a boy and how successfully he moved up through the various teams and leagues. He began to hit.

However, the real test came when, in a game in Boston late in June, a fast ball came straight at him. At the last split second he jumped aside. Blair later said, "Before that, in a situation like that my heart would race so fast I could hardly catch my breath. Anytime over the last three years when a ball would get that close, I would just go limp because it scared me so bad."

Was "Totally Relaxed"

"But after that brush-back pitch, I felt nothing. I was totally relaxed." And he drove the next pitch into a solid hit.

After that he got hit after hit, driving his average up 100 points in a matter of a few weeks. Blair now says, "The whole thing is unbelievable. It's really incredible!" He told Chan Keith, "Every now and then I have to pinch myself to make myself realize it's all not just a dream."

Dr. Conn, too, is delighted. He told MEDICAL TRIBUNE, "When I first heard about his problem, I planned several sessions—but we professionals have to face reality too. After that first session, Blair called me and said he didn't think he needed to keep the next date. I said, 'That's all right, call me when you need me.' Well, he's going great guns, and *that one session* was all he needed to overcome three years of a fear that was destroying him."

Blair faithfully follows Dr. Conn's advice to sit down before each game and recall his successful experiences as a coming-up ballplayer. "What this proves," says Dr. Conn, "is what can be done with hypnosis with selected patients—and it shows that there is no such thing as habit."

One of the few other instances of the reported use of hypnosis with athletes occurred with the Browns in 1950. That team was in a slump, and a psychologist was hired to help overcome it. That effort, however, apparently did not succeed.

Cholesterol Assays Are Recommended for All Children

Continued from page 1

importance" to identify the person at risk of atherosclerotic disease, the investigators said, "That this is a pediatric problem is evident from many studies, not least that in which, in a series of autopsies on American combat casualties in Vietnam, it was shown that some degree of coronary artery disease—that is, atheroma—was present in 45 per cent of cases studied and this involvement was judged to be severe in 5 per cent—a high proportion considering that the mean age was 22 years."

The Toronto study showed a significant rise in mean serum cholesterol from birth to five years of age and then a leveling off. There were no significant differences by sex. The levels were determined for 2,639 children. After exclusion for secondary causes of hyperlipoproteinemia, a total of 1,232 were left in the study.

In those with levels two standard deviations above the mean, the assays were repeated three times in the fasting state, in addition to assays of serum triglyceride levels and a lipoprotein electrophoresis, before the diagnosis was confirmed.

The study showed the following upper limits of normal levels for various age groups: zero to three months, 175 mg./100 ml.; four to 11 months, 195 mg./100 ml.; one to four years, 214 mg./100 ml.; five to nine years, 222 mg./100 ml.; 10-14 years, 227 mg./100 ml.; and 15-20 years, 235 mg./100 ml.

In discussion, Dr. Pearse said that any recommendation to the Ministry of Health on universal screening of children should await further study. "It may be a good thing and it may not be," he said. "We'll have to wait till we know what effect serum cholesterol has on atheroma."

Important in Some Families

In an interview, Dr. Rose, a cardiologist, commented that cholesterol level tests are important in any family with a history of premature atherosclerosis, which she defined as that occurring before the age of 50.

She noted the serum cholesterol level test is simple and inexpensive, costing about 80 cents. "We think this is good preventive cardiology and hope that pediatricians and family physicians will become interested in it."

Boxing Is Down for the Count With Physicians in Australia

Medical Tribune World Service

CANBERRA—The Australian Government plans to conduct a thorough inquiry into the promotion and control of boxing. It will also consider the establishment of a Federal boxing commission.

The Federal Minister for Recreation, Frank Stewart, announced the inquiry after a call by the Australian Medical Association for stricter controls to safeguard the health of boxers.

He said the government inquiry will range over all aspects of the sport, including promotion and telecasting.

An interdepartmental committee will study:

- Controls already existing in amateur and professional boxing.
- The justification of external controls.
- The possible spheres of influence of a boxing commission and its jurisdiction over participants, trainers, referees, and judges and over stadiums and training facilities.
- The provision of proper medical supervision.
- The provision of adequate insurance and welfare services for boxers, where necessary.
- The legal responsibility of promoters and others in contracts with boxers.
- Any special provision for televised contests.

Medical Tribune World Service

SYDNEY, AUSTRALIA—The Federal Council of the Australian Medical Association has called for strict controls on amateur and professional boxing because of the dangers of serious injury, particularly brain damage.

Action by the council followed injuries to several boxers in bouts at Sydney sports clubs and the death of a 23-year-old dock worker after an amateur match.

Medical association officials said that the council's views will be ratified as the policy of the association.

The council made the call for tighter control after receiving a report and recommendations on boxing prepared at its request by the Australian Sports Medicine Federation.

The council proposed the following:

- Minimum standards should be set for equipment used in training and boxing centers.
- Trainers should be accredited after courses of instruction and registered each year. In certain circumstances they should be liable to deregistration.
- Matchmaking should be subject to stringent provisions and supervision.
- Referees should receive adequate training concerning signs of injury.
- More points should be awarded for defensive and evasive work.
- A doctor should be present and be able to stop a bout if he thinks it advisable.

The council also recommended that boxers be barred from training or fighting for at least one month after suffering injury or knockdown, and that medical assessments of fitness for boxing should be made frequently.

MEDICAL MEETING SCHEDULE

Foreign Meetings

Sept. 8-9 .....International Congress of the Internal League Against Epilepsy, *Barcelona, Spain*
Sept. 8-15 ....International Congress of Chemotherapy, *Athens*
Sept. 10-13 ...European Conference on Pediatric Nephrology, *Strbske Pleso, Czechoslovakia*
Sept. 10-13 ...International Symposium on Electric Response Audiometry, *Bordeaux, France*
Sept. 10-14 ...International Atomic Energy Agency, Symposium on Radioimmunoassay and Related Procedures in Clinical Medicine and Research, *Istanbul, Turkey*
Sept. 10-15 ...International Congress on Cybernetics, *Namur, Belgium*
Sept. 13-15 ...Dutch Orthopedic Association International Congress on the Knee Joint, *Rotterdam*
Sept. 16-20 ...Balkan Medical Union Meeting, *Ankara*
Sept. 16-21 ...European Symposium on the Impact of Ecological Factors on Peripheral Vascular Disease, *Herzlia, Israel*
Sept. 16-21 ...International Symposium on Comparative Leukemia Research, *Nagoya and Ise-Shima, Japan*
Sept. 17-23 ...International Society of General Practice, *Igls/Innsbruck, Austria*
Sept. 19-21 ...International Symposium on the Regional Treatment of Tumors, *Saint-Vincent, Italy*
Sept. 19-23 ...Medical and Chirurgical Faculty of the State of Maryland, *Mexico City*
Sept. 20-22 ...Ontario Medical Association and Canadian Anesthetists, *Sarnia, Ont.*
Sept. 23-24 ...Society for Pediatric Radiology, *Montreal*
Sept. 24-28 ...International Academy of Legal Medicine, *Rome*
Sept. 24-28 ...International Tuberculosis Conference, *Tokyo*
Sept. 24-28 ...South African Society of Otorhinolaryngology, *Cape Town*
Sept. 25-28 ...American Roentgen Ray Society, *Montreal*
Sept. 27-29 ...Symposium on the Physiomorphology of Neuromuscular Function, *Cracow, Poland*
Sept. 27-Oct. 6 .....International Congress of Rheumatology, *Kyoto, Japan*

IMMATERIA MEDICA

Monkey therapists, yet

Four male monkeys were first driven batty by being kept in total isolation for six months after their birth, then were brought to "virtually complete recovery" by being permitted contact with immature females, three months younger than the males, the University of Wisconsin reports.

The scientists who conducted the experiment refer to these female monkeys as "therapists" (their quotes, incidentally), although, as far as we can make out, the ladies have never been admitted to a clinical program or even begun a training analysis. Their chief claim to credentials for therapeutic status seems to be that they are young, and we must assume that the youth bit is spreading throughout the entire animal kingdom.

At any rate, the release says they were "too young to be aggressive as peers, or to show behavior more complex than clinging and simple playing." It also notes that in earlier experiments, attempts to rehabilitate isolates by exposing them to normal peers had not worked.

In the treatment plan, the isolate and his teeny-bopper therapist interacted as a pair for two hours a day, three times a week—there was also group therapy. The first response of the therapists to the troubled isolates was just to cling to them in a very accepting way. After about a week, the males returned the clinging—and there's no need for all that giggling in the back row.

Now you can't tell the isolates from the therapists, but the patients, says the study, "cannot be considered completely normal until they become old enough to mate."

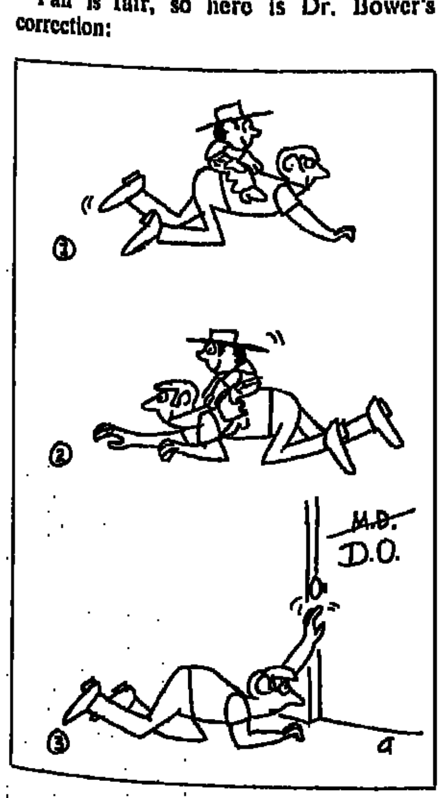
The moral of the experiment seems to be that no matter what happens to you, "the potential for recovery remains as long *as an* appropriately designed teaching *method is* available to tap this potential."

If we get word of a human experiment along similar lines, we'll report it.

* * *

A cartoon MEDICAL TRIBUNE ran recently prompted Lawrence Ray Bower, D.O., of Silver Springs, Md., to return a corrected version along with a note saying, "I think the lettering on the door should read D.O. and not M.D."

Fair is fair, so here is Dr. Bower's correction:



* * *

"At last science benefits humanity. Meet the people you love and like through Dateline, Britain's best known computer introduction service," says the first ad in the "Personal" column.

"Ideal partners sincerely yours from Computadate," says the second, and "Contacts Unlimited" is the name of the third. They all appear in *New Scientist*.

New Scientist?

Acupuncture's No Mystery, Pain Expert Tells A.M.A.

Medical Tribune Report

NEW YORK—There has been altogether too much mystery surrounding acupuncture, a noted pain expert told an acupuncture symposium, the first sponsored by the American Medical Association.

"Every culture on every continent has developed its own type of acupuncture," said Ronald Melzack, Ph.D., Professor of Psychology at McGill University, Montreal. He cited scarification, trepanation, and cupping as other pain-relieving techniques that may possibly work by ways similar to acupuncture.

There are three features in acupuncture pain treatment and "not one of them is a mystery to use," he commented. These include hyperstimulation analgesia, the fact that stimulation of a point may affect a distant area, and the fact that acupuncture effects may persist even after needles are withdrawn.

Dr. Melzack, who is coauthor of the gate control theory of pain, said that a first step in explaining acupuncture is to drop the older, oversimplified view that there is a simple one-to-one relationship between stimulus and pain. Transmission of pain, he said, is a dynamic process, capable of being modulated.

In another comment, an official of the Food and Drug Administration, David Link, observed that there has never been any "medical technique that has been so highly publicized [as acupuncture] and about which so little is known." He added that there are great opportunities for the unscrupulous to abuse the technique.

He noted that the FDA legally has no premarket control over acupuncture instruments or any other medical device. The agency, however, does have authority over "adulteration or misbranding" of these devices, he said. Current FDA policy is to regard as misbranded any claim for diagnostic or therapeutic effectiveness made for any acupuncture device. They must be clearly labeled as experimental, Mr. Link said.

Panel moderator, Dr. Walter Judd, a medical missionary to pre-Revolutionary China, stressed the need for increased research and investigation of acupuncture's mode of action.

Medicine on Stamps

Moshe Ben Maimonides

Born in Cordova, Spain, Moshe Ben Maimonides (1135-1204) studied sciences at the University of Cordova until his family and other Jews were forced out of Cordova. Finishing his education in Cairo, he achieved fame as a physician as well as a rabbi and became physician to the Sultan Saladin. His most widely known medical work was his *Book of Counsel* (1198), a series of letters on diet and hygiene. Maimonides' credo was: "Live sensibly—among a thousand people only one dies a natural death, the rest succumb to irrational modes of living." Israel issued the stamp in 1953.

Text: Dr. Joseph Kler
Stamp: Minkus Publications, Inc., New York